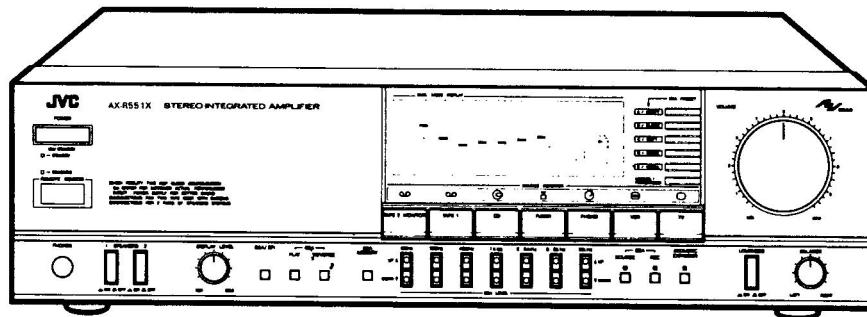


JVC**SERVICE MANUAL****STEREO INTEGRATED AMPLIFIER****MODEL No. AX-R551X BK****Contents**

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Safety Precautions

1. The design of this product contains special hardware and may circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the product have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by shading on the schematics and by (Δ) on the Parts List in the Service Manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the Parts List of Service Manual may create shock, fire, or other hazards.
4. The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after re-assembling.
5. Leakage current check (Electrical shock hazard testing)

After re-assembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.

Do not use a line isolation transformer during this check.

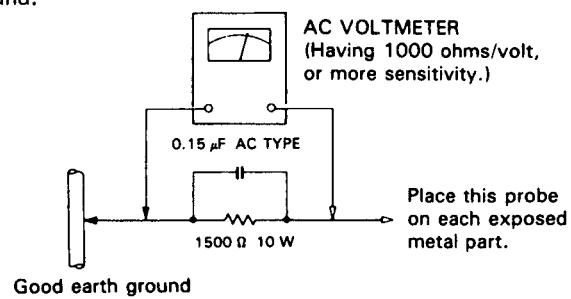
- Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5 mA AC (r.m.s.).

• Alternate check method

Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having 1,000 ohms per volt or more sensitivity in the following manner. Connect a $1,500 \Omega$ 10 W resistor paralleled by a $0.15 \mu\text{F}$ AC-type capacitor between an exposed metal part and a known good earth ground.

Measure the AC voltage across the resistor with the AC voltmeter.

Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75 V AC (r.m.s.). This corresponds to 0.5 mA AC (r.m.s.).



Warning

1. This equipment has been designed and manufactured to meet international safety standards.
2. It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
3. Repairs must be made in accordance with the relevant safety standards.
4. It is essential that safety critical components are replaced by approved parts.
5. If mains voltage selector is provided, check setting for local voltage.

Specifications

Output

For Europe, Australia, Germany and U.K.:
85 watts per channel into 8 ohms at 1 kHz (DIN).

75 watts per channel, min. RMS, both channels driven, into 8 ohms from 20 Hz to 20 kHz, with no more than 0.007% total harmonic distortion.

80 watts per channel, min. RMS, both channels driven, into 8 ohms at 1 kHz with no more than 0.003% total harmonic distortion.

For Other areas:

100 watts per channel, min. RMS, both channels driven, into 8 ohms from 20 Hz to 20 kHz, with no more than 0.03% total harmonic distortion.

100 watts per channel, min. RMS, both channels driven, into 8 ohms at 1 kHz with no more than 0.007% total harmonic distortion.

(measured by JVC Audio Analyzer System)

Total harmonic distortion : 0.007% (20 Hz – 20 kHz, 8 ohms) at 75 watts (For Europe, Australia, Germany and U.K.)
0.03% (20 Hz – 20 kHz, 8 ohms) at 100 watts (For other area)

Power band width : 7 Hz – 60 kHz ('66 IHF 0.05%, 8 ohms, both channels driven)
(For Europe, Australia, Germany and U.K.)
10 Hz – 30 kHz ('66 IHF 0.2%, 8 ohms, both channels driven)
(For other area)

Frequency response : 6 Hz – 70 kHz, +0.5, –3 dB (8 ohms)
(For Europe, Australia, Germany and U.K.)
10 Hz – 50 kHz, +0.5, –3 dB (8 ohms)
(For other areas)

Input terminals

Input sensitivity/ impedance (1 kHz)

PHONO : 2.5 mV/47 kohms
TUNER, CD, : 200 mV/35 kohms
TAPE 1, VCR, TV,
TAPE 2 MONITOR

Signal-to-noise ratio

PHONO : 70 dB ('66 IHF)
78 dB ('78 IHF, Rec Out)
67 dB (DIN)
TUNER, CD, : 97 dB ('66 IHF)
TAPE 1, VCR : 74 dB ('78 IHF,
TV, TAPE 2 Speaker Out)
MONITOR : 68 dB (DIN)

S.E.A. graphic equalizer

Center frequencies : 63 Hz, 160 Hz, 400 Hz,
1 kHz, 2.5 kHz,
6.3 kHz, 16 kHz

Control range : +12 dB ±1 dB,
–12 dB ±1 dB

Loudness controls : +4 dB (at 100 Hz)
(Volume control at +4 dB (at 10 kHz)
–30 dB position)

PHONO RIAA : ±0.5 dB
deviation (20 Hz – 20 kHz)

Recording output

Output level/impedance
TAPE REC-1, 2 : 200 mV/1.8 kohms
VCR REC

GENERAL

Power source : Refer to the table on back page.

Dimensions : 435 (W) x 117 (H) x 345 (D) mm
17-3/16" x 4-5/8" x 13-5/8"

Weight : 9 kg (19.8 lbs)

Design and specifications subject to change without notice.

POWER SPECIFICATIONS

Areas	Line Voltage & Frequency	Power Consumption
Continental Europe	AC 220 V ~, 50 Hz	205 watts
U.K.	AC 240 V ~, 50 Hz	475 watts
Australia	AC 127/220 V ~selectable, 50/60 Hz	
Saudi Arabia	AC 110/120/240 V ~selectable, 50/60 Hz	220 watts
Other areas		

FRONT PANEL

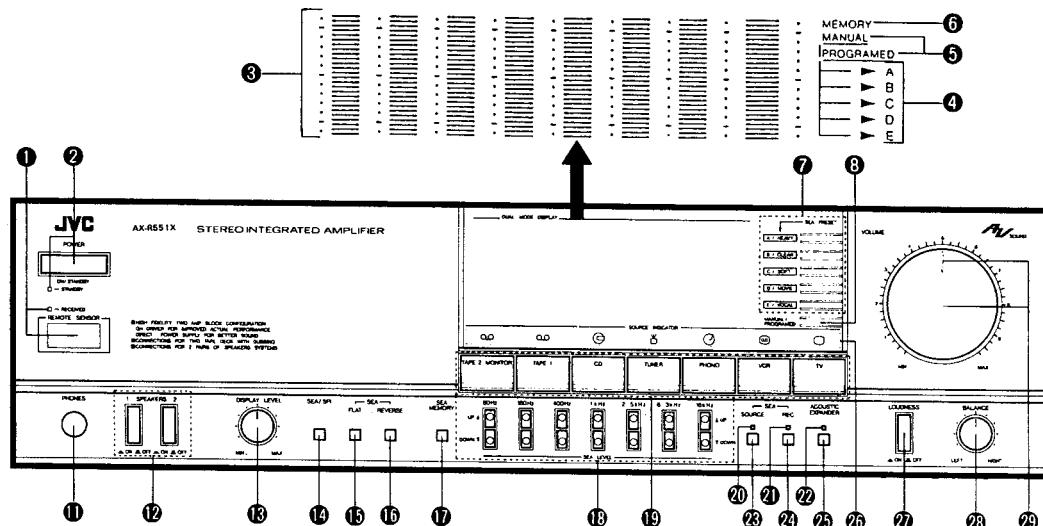


Fig. 3

① REMOTE SENSOR

This sensor receives infrared signals from the remote control unit.

RECEIVED indicator

This indicator will go on while infrared signals are being received from the remote control unit.

② POWER

ON: Press to turn the power on. To turn the power off, press it again.

STAND BY: When all of the indicators (other than the STAND BY) are turned off, the memory circuit operates and the preset stations and the source selectors are not subject to cancellation or accidental alteration as long as the power cord is plugged into an AC outlet. This situation is called the STAND BY mode. The preset data and the source select data are maintained even in the case of a power failure or when the power cord is disconnected, provided loss of power does not exceed a couple of days.

STAND BY indicator

Connecting the power plug to the AC wall outlet causes this indicator to light, indicating that the unit has been placed in the stand-by mode. The light of this indicator will go out when the power button is turned on.

Note:

- Even when the POWER button is set to STAND BY, this receiver consumes a small amount of electricity (5 watts). To shut the power off completely, disconnect the power cord.

③ SPECTRO PEAK indicator/SEA GRAPHIC EQUALIZER indicator

This display doubles as a SPECTRO PEAK indicator and an SEA GRAPHIC EQUALIZER indicator. It is switched between display by pressing the SPI/SEA button.

SPECTRO PEAK INDICATOR: The output signal is divided into seven frequency bands, whose center frequencies are identical to those of the seven SEA bands. This SPECTRO PEAK INDICATOR shows the output signal level in each frequency band. For easy viewing, the indicator is designed so that its response time is faster when rising and slower when decaying.

SEA GRAPHIC EQUALIZER: The dot point rises and falls in response to the pressing of the corresponding SEA LEVEL buttons to show the SEA level in each frequency band.

Notes:

- The SEA GRAPHIC EQUALIZER level indicator is shown for about five seconds immediately after power is applied.
- When a signal level is displayed by SPECTRO PEAK INDICATOR, SEA GRAPHIC EQUALIZER is displayed for 5 seconds by pressing SEA LEVEL, SEA PRESET, SEA FLAT, SEA REVERSE, MANUAL/PROGRAMED or SEA MEMORY button.

④ SEA PRESET indicator

Pressing the MANUAL/PROGRAMED button will cause indicator A, B, C, D, or E to light, according to which preset pattern was being used the last time the unit was in that particular mode (MANUAL or PROGRAMED). If no preset pattern was being used, no preset pattern indicator will light. These indicators also light when an SEA PRESET button has been pressed, to select a preset pattern or to store a newly-created pattern in memory.

⑤ MANUAL/PROGRAMED indicator

Pressing the MANUAL/PROGRAMED button causes "MANUAL" or "PROGRAMED" to light on the display, indicating which mode has been selected.

⑥ MEMORY indicator

This indicator lights for about five seconds when the MEMORY button is pressed, indicating the unit is ready to accept the pattern you have created for storage in memory.

⑦ SEA PRESET

Press to store the displayed S.E.A. pattern in memory or to recall the preset S.E.A. pattern corresponding to the button pressed. While in the MANUAL mode, pressing the SEA MEMORY button and then one of these 5 button will store the patterns you have created. Later, while MANUAL mode, that pattern can be recalled by pressing the appropriate SEA PRESET button. Up to 5 original patterns can be stored for recall in this way.

A different set of S.E.A. patterns is available when in the PROGRAMED mode. These 5 patterns (HEAVY, CLEAR, SOFT, MOVIE and VOCAL) have been permanently stored in memory before the unit was shipped, and may not be replaced. So, up to 10 patterns may be recalled.

⑧ MANUAL/PROGRAMED

Press to switch between the MANUAL and PROGRAMED S.E.A. pattern modes.

⑨ PHONES (Headphone Jack)

Plug stereo headphones into this jack for private listening and record monitoring. If you want to listen to sound from the headphones only, press the SPEAKERS buttons to OFF.

⑩ SPEAKERS

SPEAKERS 1: Press to switch the speakers connected to the SPEAKERS 1 terminals on or off.

SPEAKERS 2: Press to switch the speakers connected to the SPEAKERS 2 terminals on or off.

Note:

- When speakers are connected to only one of the SPEAKERS terminals, press only the SPEAKERS button of the system connected; if both buttons are pressed, sound will not be heard from either speaker system. When two pairs of speakers are connected and either or both SPEAKERS buttons are pressed, sound will be heard from either or both speaker system(s).

⑪ DISPLAY LEVEL

Adjusts the relative display position on the SPECTRO PEAK INDICATOR so that weak or strong level signals can be displayed in an easy-to-see position. This control has no effect on the output sound level.

⑫ SPI/SEA

Press to switch the indication between the SPECTRO PEAK INDICATOR and SEA GRAPHIC EQUALIZER level indicator.

⑬ SEA FLAT

Press this button for a flat response.

⑭ SEA REVERSE

Press this button to reverse the pattern's characteristics.

⑮ SEA MEMORY

Press this button and the MEMORY indicator will light for about five seconds. While it is lit, press one of the SEA PRESET buttons to store in memory the SEA pattern currently being displayed.

⑯ SEA LEVEL

The built-in graphic equalizer divides the audio spectrum into seven frequency bands with center frequencies from 63 Hz to 16 kHz at intervals of 4/3 octave.

When the S.E.A. level is set to "0" (center position), frequency response is flat. The response in each band can be varied up to ± 12 dB by pressing the UP or DOWN SEA LEVEL buttons.

Buttons for different frequency bands can be pressed at the same time, and holding them down causes the level to continue rising or falling.

63 Hz: Raise to emphasize the very low bass response of organs, drums, etc. It produces stable and solid sound with emphasis and eliminates the unclear sound response of low frequencies with de-emphasis.

160 Hz: Emphasize to obtain a more expanded low sound. De-emphasize to eliminate unclear sound caused by large or nearly empty listening rooms.

400 Hz: This frequency range is the basis on which music is constructed. Emphasize to put a punch to your music.

1 kHz: Most effective in emphasizing or de-emphasizing the human voice. Emphasize to cause the vocalist to be brought to the foreground, or de-emphasize to cause it to recede into the background.

2.5 kHz: This frequency stimulates the human ear. If the music sounds hard or metallic, de-emphasize.

6.3 kHz: Boost to add clarity to winds and strings. This frequency band varies the tonal expression, influencing the subtleties of the music.

16 kHz: Boosting this frequency range properly adds to the delicacy of highs, with cymbals and triangles resounding in a more ear-pleasing manner, and provides a feeling of extension. This frequency band can also be used to compensate for cartridge response since most moving-magnet cartridges have their resonance peaks in the frequency range from 10 kHz to 20 kHz.

⑰ SOURCE SELECTOR

TAPE 2 MONITOR: Press to listen to a cassette deck connected to the TAPE 2 terminals. Press again, and this button will release this function so that the source selected by another source select button may be heard.

Note:

- Press this button to monitor the recorded sound (listening to the sound just recorded) when using a three-head tape deck.

TAPE 1: Press to listen to a cassette deck connected to TAPE 1 terminals.

CD: Press this button to listen to a compact disc player connected to the CD terminals.

TUNER: Press this button to listen to a radio broadcast.

PHONO: Press to listen to a turntable connected to the PHONO terminals.

VCR: Press this button to listen to the sound of the VCR connected to the VCR terminals.

TV: Press this button to listen to the sound from the TV connected to the TV terminals.

⑲ SEA SOURCE indicator

This indicator lights when the SEA SOURCE button has been pressed to ON.

⑳ SEA REC indicator

This indicator lights when the SEA REC button has been pressed to ON.

㉑ ACOUSTIC EXPANDER indicator

This indicator lights when the ACOUSTIC EXPANDER button has been pressed to ON.

㉒ SEA SOURCE

Press this button to listen to the S.E.A.-compensated sound.

㉓ SEA REC

Press this button to record S.E.A.-compensated signals.

Note:

- S.E.A. recording is possible when the TAPE 1 or VCR terminals are used but is not possible when the TAPE 2 terminals are used.

㉔ ACOUSTIC EXPANDER

When this button is pressed, the ACOUSTIC EXPANDER indicator lights and the sound image is expanded; a monaural signal will be given a stereo effect and a stereo signal sounds better.

Notes:

- When a TV or VCR is monaural, use the L and R distributor (mono - L and R) for connecting the left and right terminals.
- ACOUSTIC EXPANDER sound effect cannot be recorded.

26 SOURCE indicator

The indicator light corresponding to the source selector button pressed.

27 LOUDNESS

Press this button to compensate for the ear's lower sensitivity at low listening levels.

28 BALANCE

Use to adjust the balance between the left and right speakers. Normally set this control to the center click position.

29 VOLUME and INDICATOR

Controls the volume of the speakers and headphones, and this indicator lights when the POWER button has pressed to on.

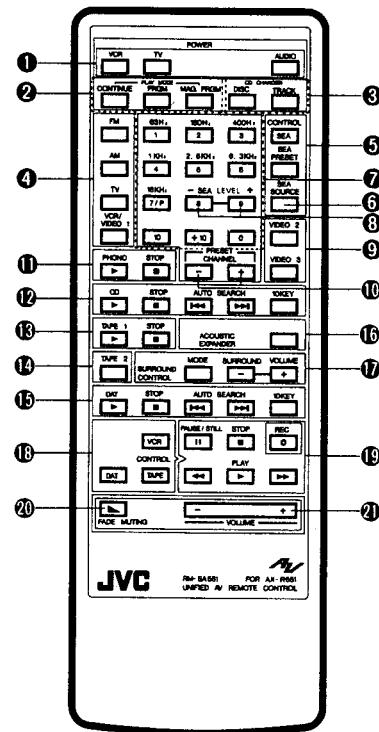
REMOTE CONTROL UNIT

Fig. 5

① POWER

AUDIO: Press this button to switch the AX-R551BK's power on or off.

TV: For use with the TV. Press this button to switch the TV's power on or off.

VCR: For use with the VCR. Press this button to switch the power on or off.

Note:

- Provided one of JVC-specified VCRs or TVs are used, they can be remote-controlled.
- Before operating the television or VCR by remote control, be sure to carefully read the television or VCR instruction manual.

② PLAY MODE

Press this button for changeover to CD AUTO CHANGER.

CONTINUE: Press this button to listen to the compact discs loaded in the CD magazine in the loaded (numerical) order regardless of the setting for programmed playback.

PRGM: Press this button to listen to the compact discs in programmed order.

MAG.PRGM: Press this button to listen to the compact discs in the order of the program previously stored for each magazine.

③ CD CHANGER

These buttons are for use in specifying a disc or track by its number. When so specifying the No. of a particular disc or track, the 10 KEY buttons ⑦ must be switched over to serve the changer in advance.

DISC: To specify a disc No., press this "DISC" button first and press 10 KEY buttons ⑦ (1 ~ 7/P) corresponding to the No..

TRACK: To specify a track No., press this "TRACK" button first and press 10 KEY buttons ⑦ (1 ~ 10, +10, 0) corresponding to the No..

Notes:

- For the proper method of using 10 KEY buttons, see page 14.
- To play a compact disc, press ▶ button ⑫.
- For details on the CD auto changer, consult its instruction book.

④ SOURCE CONTROL

FM: Press this button to listen to an FM broadcast.

AM: Press this button to listen to an AM broadcast.

TV: Press this button to listen to the TV connected to the TV terminals.

VCR/VIDEO 1: Press to listen to the VCR connected to the VCR terminals and select the external input "VIDEO 1" on the TV set at the same time.

Notes:

- Where the input to the TV is VIDEO 1 which is connected to the VCR, a black-and-white stripe pattern will appear on the TV screen when the VCR is switched to FF, REW or STOP. The video noise will sometimes affect the system's audio system as audio noise. When switching to another source, switch the TV input to a source other than VIDEO 1.
- Consult instruction book of VCR, VIDEO and TV.

⑤ CONTROL

SEA: Press this button before adjusting the S.E.A. graphic equalizer using the equalizer control buttons.

SEA PRESET: Press this button to select an S.E.A. preset pattern. Each time this button is pressed, the preset pattern is set to successively change in this order: MANUAL A - B - C - D - E - PROGRAMED A -- B - C - D - E, then returns to the MANUAL A.

⑥ SEA SOURCE

Press this button to listen to the source with S.E.A. compensation.

⑦ 10 KEY (1 ~ 10, 0, +10)

These buttons are for directly accessing the FM/AM preset stations, or various TV channels, also for selecting the CD track No. or the CD changer disc No. and also the 10 KEY operation for selecting the DAT's piece No..

SEA: When the CONTROL SEA button ⑤ has been pressed, some of these buttons can be used to select the graphic equalizer band to be adjusted.

TV or VCR: When the TV (VCR/VIDEO 1) button has been pressed, these button can be used to select TV channels (TV channels of VCR).

TUNER, CD or DAT: When the 10 KEY button has been pressed, use this button to assign the CH numbers or track numbers (1 ~ 10) for a disc which is to be played or programmed. To assign a track number over 10, use a combination of the +10 button and numeric button. (Examples)

- 5: Press numeric button 5.
- 10: Press numeric button 10.
- 17: Press the +10 button once and numeric button 7/P.
- 20: Press the +10 button once and numeric button 10. (Possible to press +10, +10 and 0 buttons when the component of tuner has 0 button in addition to +10 button.)
- 25: Press the +10 button twice and numeric button 5.

Notes:

- In the case of some TUNER, CD players or DAT decks, only the 10 KEY may be used to set track numbers. When entering single-digit numbers, press the number, such as 3 and wait for 3 seconds. For double-digit numbers, such as "13", press 1, then 3.
- For details, consult instruction book of TUNER, TV, VCR, CD player and DAT deck.

⑧ SEA LEVEL

These two keys are used to adjust the level of the frequency band selected using the SEA graphic equalizer band select keys (see "SEA" above).

⑨ VIDEO 2/VIDEO 3

These buttons correspond to the external INPUT terminals on the TV set labeled VIDEO 2 or VIDEO 3.

To watch the video equipment connected to these two pairs of terminals, press one of these two buttons so that the input signal from the TV terminals can be selected easily.

⑩ PRESET CHANNEL

FM/AM/TV/VCR: When the FM, AM, TV, or VCR/VIDEO 1 button has been pressed, a preset station or TV channel can be selected by using these buttons to sequentially scan the available stations or channels in either direction.

⑪ PHONO

PHONO (▶): Press this button to start playing a record on the turntable.

STOP (■): Press this button to stop playing a record.

⑫ CD

CD (▶): Press this button to start playing a compact disc.

STOP (■): Press this button to stop playing a compact disc.

AUTO SEARCH (◀, ▶)

(◀): Press this button to move the pickup to the beginning of the current tune while it is being played. Then, each time this button is pressed, the pickup will skip to the beginning of the previous tune. Keeping this button pressed causes the pickup to skip back continuously.

(▶): Press this button to move the pickup to the beginning of the next tune. After this, each time this button is pressed, the pickup moves forward by one tune. Keeping the button pressed causes the pickup to skip forward continuously.

10 KEY (□): Press this button to use the numeric buttons ⑦ for selecting the CD track.

13 TAPE 1

TAPE 1 (▶): Press this button to start playing a tape in the cassette deck.

STOP (□): Press this button to stop playing the cassette deck.

14 TAPE 2

Press this button to listen to the source connected to the TAPE 2 terminals and press it again to disengage.

15 DAT

DAT (▶): Press this button to start a digital audio tape.

STOP (□): Press this button to stop a digital audio tape.

AUTO SEARCH (◀, ▶)

(◀): Press this button to select the beginning of the previous tune.

(▶): Press this button to select the beginning of the forward tune.

Note:

- **◀, ▶ and ▶, ▶ have the same function.**

10 KEY (□): Press this button to use the numeric buttons 7 for selecting the DAT music No..

16 ACOUSTIC EXPANDER: Press this button to switch the acoustic expander function on or off.**17 SURROUND CONTROL**

In the case of SURROUND processor (optional) corresponding COMPU LINK of JVC, possible to control the following functions. Connect surround processor (optional) to TAPE 2 terminal.

MODE: Press this button to change the surround mode sequentially in order to select your optimum surround effect.

SURROUND VOLUME [+/-]: This button is for use in adjusting the output levels of the front and surround speakers in order to enhance the surround effect.

For detail, consult the instruction book for the surround processor.

Note:

- Consult your nearest JVC dealer for the controllable surround processor by this button.

18 CONTROL**Only for use with COMPU LINK components**

VCR: Press this button to operate the VCR connected to the VCR terminals.

TAPE: Press this button to operate the cassette deck connected to TAPE 1 terminals.

DAT: Press this button to operate the DAT deck connected to TAPE 2 terminals.

Notes:

- Press the TAPE 2 button to listen to a DAT.
- How to control JVC COMPU LINK
 1. Possible to control only PLAY and STOP in the case of soft logic deck.
 2. Possible to control all in the case of full logic deck.

19 TAPE/VCR/DAT CONTROL (TAPE or VCR or DAT)

PAUSE/STILL (II): Press this button to pause during playback or recording. To release this function, press the PLAY button.

STOP (□): Press this button to stop operation.

REC (□): Press the PLAY (▶) button while pressing this button for recording.

(◀): For the cassette deck or DAT deck: Press this button to quickly wind the tape from the right to left reel. For the VCR: Press this button to take the VCR from the stop mode to the rewind mode. During playback, press this button for high-speed playback in the reverse direction (Shuttle search).

PLAY (▶): Press this button to play a tape.

(▶): For the cassette deck or DAT deck: Press this button to quickly wind the tape from the left to right reel. For the VCR: Press this button to take the VCR from the stop mode to the fast forward mode. During playback, press this button for high-speed playback in the forward direction (Shuttle search).

20 FADE MUTING (FAD)

Press this button to lower the volume in steps. The volume is further decreased each time this button is pressed.

21 VOLUME (-, +)

Press the **+** button to increase the volume and the **-** button to decrease it. When these buttons are operated, the VOLUME knob of the amplifier rotates to register the new volume level and the knob's indicator blinks.

How to install the batteries

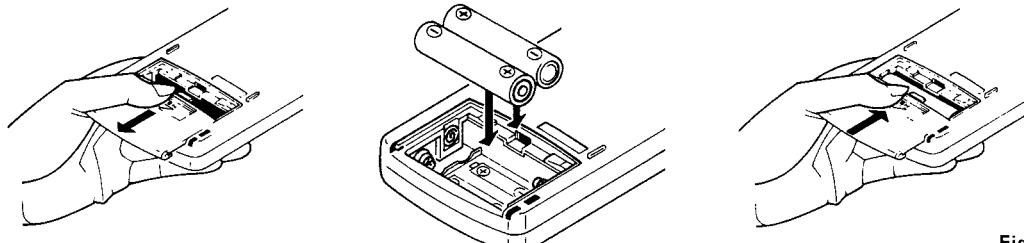


Fig. 7

Batteries

● How to install the batteries

1. Slide the cover of the battery case in the direction of the arrow to remove it.
2. Install the provided batteries ("AA": UM-3, R6, 1.5 V), with their polarities properly placed.
3. Re-install the cover of the battery case.

● Battery life

The batteries can be used for an average of 1 year.

● Battery replacement time

When the distance at which the remote control unit functions begins to decrease, replace both batteries ("AA": UM-3, R6, 1.5 V).

● How to operate the remote control unit

When the remote control unit is directly in line with the remote sensor of this unit, the remote control unit may be used from as far away as seven meters. But, when it is being used from a position one side or the other, this distance will be shortened.

Notes:

- Use a turntable with an MM cartridge.
- If your turntable has a separate ground lead, connect it to the GND terminal.

Listening to compact discs

1. Press the CD button so that the CD indicator lights.
2. Operate the CD player as described in its operation manual.

Listening to tapes

1. Press the TAPE 1 or TAPE 2 MONITOR button so that the TAPE 1 or TAPE 2 MONITOR indicator lights.
2. Operate the cassette deck for playback as described in its operation manual.

Watching and listening to TV

1. Press the TV button so that the TV indicator lights.
2. Operate the TV as described in its operation manual.

Watching and listening to a VCR

1. Press the VCR button.
2. Operate the VCR for playback as described in its operation manual.

Recording tapes

— Recording from records —

1. Press the PHONO button so that the PHONO indicator lights.
2. Operate the turntable.
3. Operate the cassette deck for recording.

Note:

- The sound you hear from the speakers or headphones is the source sound, not the recording on the tape.

— Recording from other sources (CD, TUNER, VCR, TV) —

Press the button corresponding to the source to be recorded. All other operations are identical to those when recording from records.

Tape dubbing

To dub tapes, connect two tape decks. One for playback and the other for recording. You can dub from the tape deck (connected to the TAPE 2 terminals) onto the tape deck (connected to the TAPE 1 REC terminals) and vice versa.

— Dubbing from Tape 1 to Tape 2 —

1. Activate the TAPE 1 button and the TAPE 1 indicator lights.
2. Operate the tape deck (connected to the TAPE 1 PLAY terminals) for playback.
3. Operate the tape deck (connected to the TAPE 2 terminals) for recording.

OPERATION

Before use

Connect each component correctly, then plug the power cord to an AC wall outlet.

Basic operation

1. Press the POWER button to on.
2. Select the speaker system with the SPEAKERS buttons.
3. Proceed through the steps described below according to your purpose.
4. Adjust the volume and balance you require.
5. Use the SEA buttons to obtain the tone you wish to hear.

Listening to broadcasts

1. Press the TUNER button so that the TUNER indicator lights.
2. Operate the tuner as described in its operation manual.

Listening to records

1. Press the PHONO button so that the PHONO indicator lights.
2. Operate the turntable as described in its operation manual.

— Dubbing from Tape 2 to Tape 1 —

1. Activate the TAPE 2 MONITOR button and the TAPE 2 MONITOR indicator lights.
2. Operate the tape deck (connected to the TAPE 2 terminals) for playback.
3. Operate the tape deck (connected to the TAPE 1 REC terminals) for recording.

Notes:

- When dubbing from the tape deck (connected to TAPE 2 terminals) onto the other tape deck, select the SOURCE SELECTOR button other than "TAPE 1".
- While playing back a tape on the tape deck (connected to TAPE 2 terminals), you can not record another source onto the component (connected to TAPE 1 REC terminals).
- When recording or dubbing tapes, the source sound will be heard from the speakers or headphones. (Not the sound being recorded on the tape.)
- The S.E.A. recording is not applicable to the tape deck (connected to the TAPE 2 terminals).

How to operate the monitor while recording on the tape deck

1. Connect the 3-head tape deck to the TAPE 2 terminals.
2. Make sure to connect the signal cords to the PLAY and REC terminals, and remove the remote cable connected to the tape deck.
3. Select a source from which you want to record by depressing the SOURCE selector button on this unit.
4. Operate the tape deck for recording as described in its operation manual.
5. By playing the source component, you can record on the tape deck.
6. While recording on the tape deck, the recorded sound can be heard by depressing the TAPE 2 MONITOR button on this unit or that of the remote control unit.

Using stereo headphones

Stereo headphones can be plugged into the front panel jack. The signal from this jack is independent of the speakers.

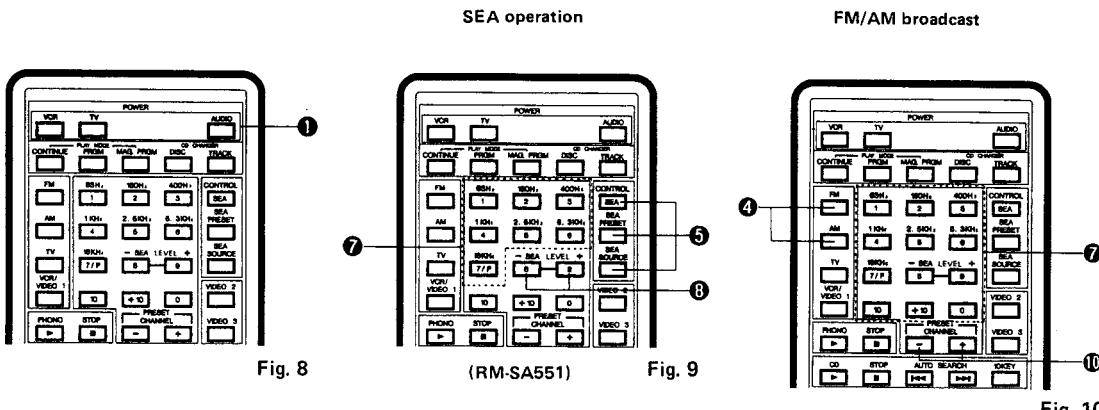
1. Plug stereo headphones into this jack for private listening.
2. To listen through headphones while listening to the speakers, press the appropriate SPEAKERS button to ON (—).

HOW TO USE THE REMOTE CONTROL UNIT

- The "COMPU LINK" component system is composed of the following: tuner, CD player, cassette deck, record player and DAT deck, all using COMPU LINK 1/SYNCHRO terminals for connection.
- Each "COMPU LINK" component can be put in operation by merely operating the button on the remote control unit: it is not necessary to press the source selector button on the amplifier.
- Example: A component is playing when you set the target component in playback by pressing the PLAY button (of the remote control unit): as you press the PLAY button, the other component will automatically stop playing.

Notes:

- When the DAT deck is playing, it will not stop playing even if other components are started. And vice versa, if a component other than the DAT deck is playing and the DAT is then started the component that was playing will not stop.
- If the component already in playback happens to be device not covered by "COMPU LINK", it will keep on playing back in the above case. To stop that non-COMPU LINK device (which may be a VCR, video deck, TV or sound processor), press its STOP button.
- The remote control unit works best when it is held level and aimed straight at the remote sensor of the amplifier. If the signal emitted by the control unit is received by two or more components, The recipients may hesitate to start up. In this case, keep pressing the button until all of the target components start. If the target components are wide apart, they may not be able to receive the emitted signal simultaneously, so that some of them may remain still. In such case, re-aim the control unit to the remote sensor of each still component and press the button.
- The remote control unit has no memory capability. Thus, programming by using memory, if desired, must be effected at the component, which may be a tuner, CD player or DAT player.



FM/AM broadcast or TV

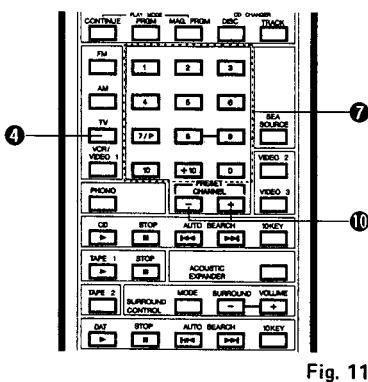


Fig. 11

Turning ON and OFF of power supply (Fig. 8)

- ① POWER [AUDIO]: Press this button to turn ON the amplifier, and press it again to turn it OFF.
- ② POWER [VCR]: Press this button to turn ON the VCR, and press it again to turn it OFF.
- ③ POWER [TV]: Press this button to turn ON the TV, and press it again to turn it OFF.

SEA operation (Fig. 9)

1. ⑤ CONTROL [SEA]: Pressing this button sets these buttons automatically in SEA mode: 10 KEY, 63 Hz ~ 16 kHz ⑦ [1] ~ [7/P] and SEA LEVEL ⑨ [8] ~ [9].
2. ⑦ [1] ~ [7/P]: Press the button for the band, whose level you want to change.
3. ⑧ [8] ~ [9]. Pressing button [8] lowers the level of the selected band; pressing button [9] raises its level.

To listen to radio broadcast, FM or AM (Fig. 10)

1. ④ [FM] or [AM]: Pressing this button (FM or AM) sets these buttons in FM or AM mode, 10 KEY: ① ~ ⑩, [+10], [0].

Note:

- The amplifier source selector automatically switches over to "TUNER" and the tuner will indicate "FM" or "AM".
- 2. ⑦ [1] ~ [10], [+10], [0]: Of the preset channels, programmed in the tuner, check the number of the channel of your choice, and press the button corresponding to that channel number. Examples:
Channels 1 ~ 10:
For Channel 5, press numeric button [5].
For Channel 10, press numeric button [10].
Channel 17: Press [+10] button once and then numeric button [7/P].
Channel 20: Press [+10] button once and then numeric button [10].
Channel 25: Press [+10] button twice and then numeric button [5].
- 3. ⑩ PRESET CHANNEL [-] [+]: These buttons are for incrementing or decrementing the number. That is, selecting the next channel above or below the currently selected channel.

To listen to TV broadcast (Fig. 11)

Turn power ON in each component involved.

1. ④ [TV]: Pressing this button switches the source selector automatically to TV. (TARGET → AMPLIFIER)
- ④ [TV]: VCR goes into TV mode by pressing this button. (TARGET → VCR)
- ④ [TV]: TV goes into TV mode by pressing this button. (TARGET → TV)

Notes:

- For remote control or VCR and TV, refer to page 28.
- These buttons automatically shift to TV mode: ⑦ 10 KEY, ⑩ PRESET CHANNEL [-] [+].
- 2. ⑦ [1] ~ [9], [0] (When you select VCR or TV on the remote control): Press the button for the desired TV channel.
- 3. ⑩ PRESET CHANNEL [-] [+]: For shifting the channel selection upward or downward. Each push of the button selects the channel immediately next to the current channel.

CONTROL TAPE 1 or DAT

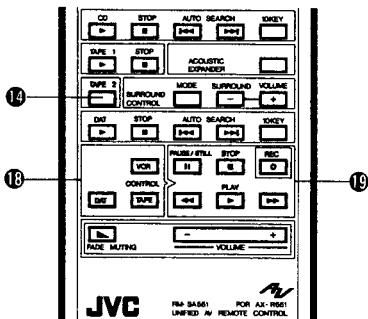


Fig. 16

Control the COMPU LINK cassette deck and "DAT deck" without changing the "SOURCE SELECTOR" of the amplifier. See the Note**. (Fig. 16)

1. ⑯ CONTROL TAPE or DAT: Pressing TAPE button or DAT button makes the control button ⑯ serve the cassette deck or the DAT deck, respectively.
2. ⑯ PLAY ▶: Pressing this button starts the cassette or DAT deck for playback.
3. ⑯ STOP □: Pressing this button stops the cassette or DAT deck to interrupt the playback.
4. ⑯ PAUSE/STILL □: Pressing this button pauses the cassette or DAT deck in play back operation.
5. ⑯ ▶▶: Pressing this button resumes the recording operation that has been interrupted by pause.
6. ⑯ ▶▶▶: Pressing this button sets the tape in rapid winding into the left cassette reel.
7. ⑯ ▶▶▶▶: Pressing this button sets the tape in rapid winding into the right cassette reel.
8. ⑯ REC □ + PLAY ▶: Pressing ▶ button while keeping □ button pressed commences recording.
9. ⑯ REC □ + PAUSE/STILL □: Pressing these buttons, □ and □, at the same time pauses the recording operation. (Recording can be resumed at anytime.)

Notes:

- * By operating the remote control unit, you can select the "TAPE 2" of the amplifier. But the cassette recorder (named "TAPE 2") will not start playing. To play the TAPE 2, press its PLAY button.
- ** To play the DAT deck, connect it to the TAPE 2 terminals of the amplifier. Press the ⑯ TAPE 2 □ button, ⑯ DAT and operate the button ⑯.

Note:

- In the case of cassette deck, some aren't activated.

VCR

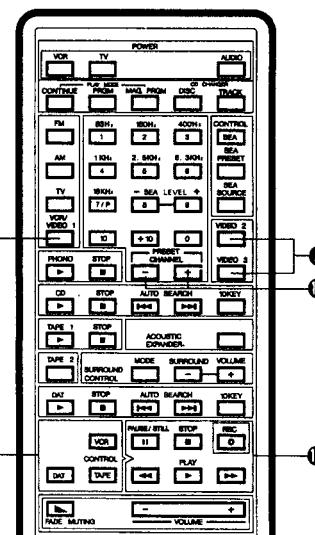


Fig. 17

Video cassette recorder playback (Fig. 17)

1. ④ VCR/VIDEO 1 □: Pressing this button switches the source selector over automatically to VCR.
2. ④ VCR/VIDEO 1 □ (TARGET → TV): This is for switching the TV's "INPUT SELECT" to VIDEO 1 or VCR.

Notes:

- When the VCR is set to the fast forward, rewind or stop mode, selecting the VIDEO signals from the TV LINE OUT terminals (for VIDEO) may cause black and white stripes on TV screen.
- Consult instruction book of the corresponding components.

3. ⑯ PLAY ▶ (TARGET → VCR): Pressing this button sets the VCR in playback operation.

Notes:

- In this case, the on-going play is not stopped. If you wish to stop, take the action required.
- It takes a few seconds for a pictures to appear on TV screen.

4. ⑯ STOP □ (TARGET → VCR): For stopping VCR.
5. ⑯ PRESET CHANNEL □ - + (TARGET → VCR): For switching the VCR tuner's channel upward or downward.

How to control the VCR without making any selection with the amplifier's source selector (Fig. 17)

1. ⑯ CONTROL VCR: Pressing this button makes the control button ⑯ serve the VCR.
2. ⑯ PLAY ▶ (TARGET → VCR): Pressing this button starts the VCR in playback.

OPERATION OF THE S.E.A. GRAPHIC EQUALIZER

Compensation for room acoustics

The frequency response of the listening area varies depending on the room's shape, furnishings, and the position of the listener in the room. Each listening position in the room provides the listener with a different set of frequency responses, as a result of different degrees of reverberation, reflection, echo, and absorption affecting each frequency.

The S.E.A. system can function to make the sound response of a room flat by emphasizing those frequencies having a high degree of absorption and de-emphasizing those frequencies having a high degree of reflection.

The frequency range affected by "absorption" and "reflection" are narrow; therefore, it is only necessary to compensate the corresponding frequency band. Since conventional tone control systems simply adjust the highs and lows centered around the frequency off 1 kHz, they are both imprecise and incomplete. The AX-R551BK monitors and equalizes seven separate audio frequency bands, thus allowing you to make the necessary adjustments in the precisely appropriate frequency bands in order to compensate for the acoustic response of a room and any listening position in it.

Operation

S.E.A. pattern memory

For your own sound compensation and processing, you can use the 10 PROGRAMED and MANUAL preset S.E.A. patterns.

PROGRAMED

These five S.E.A. patterns were preset at the factory to offer suggested settings for various types of audio programs. Each preset pattern is shown below. After recalling these patterns, you can further change each frequency band to suit yourself. However, since they are representative patterns, the original, stored pattern will be unchanged.

HEAVY (PROGRAMED A) Fig. 22

Used for music with a heavy beat, such as rock music. Low frequencies are emphasized to produce a deeper, more powerful sound. Higher frequencies are also emphasized to enhance and bring clarity to the highs, including the percussive notes.

CLEAR (PROGRAMED B) Fig. 23

For crisp, clear sound with transparent highs. The low and middle frequencies that tend to be unclear are de-emphasized, and the middle and high frequencies that strengthen the vocal component of the music are emphasized.

SOFT (PROGRAMED C) Fig. 24

For background music. The very low frequencies, which need boosting at low volume levels, are emphasized, and the stimulating effect of higher frequencies is diminished by de-emphasizing high frequencies.

MOVIE (PROGRAMED D) Fig. 25

For TV, VCR, and video disc sound. The low and high frequencies, which are usually of insufficient strength in the sound of these sources, are emphasized to produce a balanced, deeper sound. Also, the excessive brightness that is characteristic of these sources, sound is cut back by de-emphasizing the middle frequency band.

VOCAL (PROGRAMED E) Fig. 26

For music that is chiefly vocal, or speech. The middle frequencies, which carry the human voice, are emphasized, while surrounding frequencies are reduced. To accent the higher vocal notes, the highest frequencies are also boosted.

MANUAL

These five S.E.A. pattern memories are provided to allow you to create, store, and recall up to five S.E.A. patterns.

To store the S.E.A. pattern in memory, proceed as follows:

1. Set the S.E.A. pattern using the SEA LEVEL UP/DOWN buttons. This will cause the MANUAL indicator to light, if it has not been lit already.
2. Press the MEMORY button. The MEMORY indicator will light for five seconds.
3. During this period, press the appropriate SEA PRESET button to store the pattern in memory. The SEA PRESET indicator corresponding to the button just pressed will light, the MANUAL indicator will re-light, and the MEMORY indicator will go off.

S.E.A. recording

The S.E.A. graphic equalizer tailors the sound to your own particular taste and compensates for room acoustics or system characteristics, as described on page 33. The AX-R551BK is equipped with an SEA REC button which makes it possible to record with the added effect of the S.E.A.

Operation

1. Set the S.E.A. pattern as required.
2. Press the SEA REC button.
3. Proceed in the same way as in normal recording.

Notes:

- When you turn the VOLUME control on the amplifier or press the VOLUME buttons on the remote control unit during S.E.A. recording, the recording level will not be affected.
- S.E.A. recording is possible when using the TAPE 1 or VCR terminals, but not when using the TAPE 2 terminals.



Fig. 22



Fig. 23



Fig. 24



Fig. 25



Fig. 26

Removal Procedures

■ Removing the Top Cover

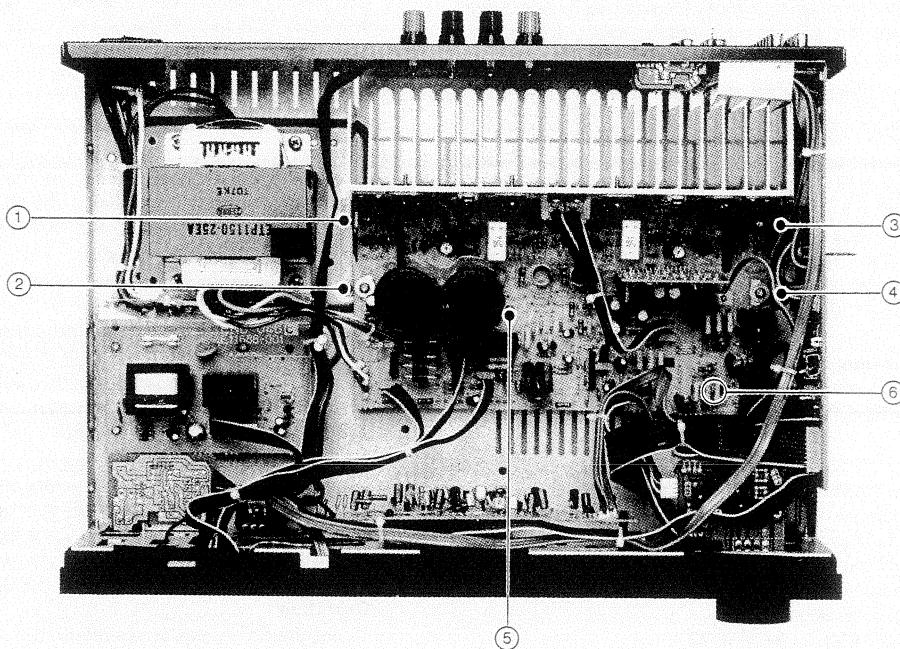
1. Remove six screws.
2. Remove the top cover by lifting up its rear section and pulling it backward while holding it on incline.

■ Removing the Front Panel

1. Remove the top cover.
2. Remove three plastic rivets on the upper part of the front panel and three screws from the lower part.
3. Pull out the volume knob and remove the front panel.

■ Removing the Power Transistors

1. Remove the top cover.
2. Remove screws ① ~ ⑤.
3. Remove PC board retaining fastener ⑥ located under R809.
4. Raise the power amplifier PCB so that the pattern side faces up.
5. Unsolder the power transistors.
6. Remove the screws holding the power transistors using a wrench having a diagonal length of 5.5 mm.

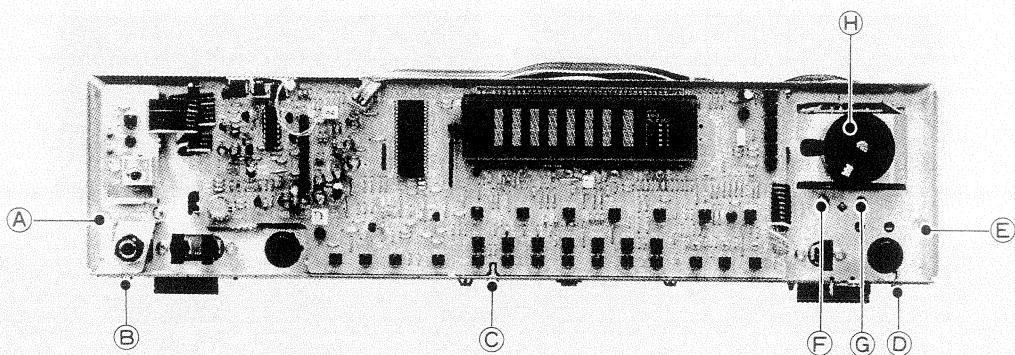


■ Remove the Motor Volume PC Board

1. Remove the front panel.
2. Remove screws Ⓐ ~ Ⓔ, and pull out the front bracket.
3. Turn the holder counterclockwise securely, and re-

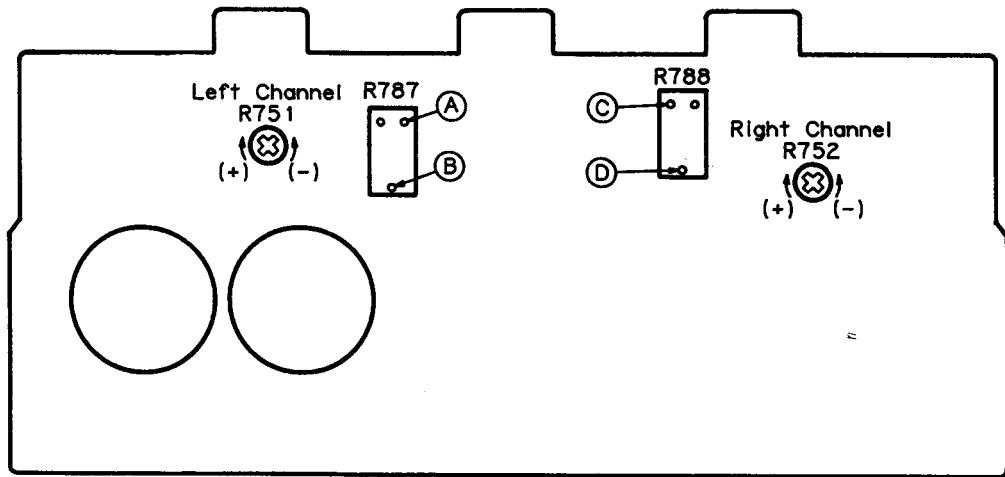
move it.

4. Remove the volume retaining nut and screws Ⓛ, Ⓜ and remove the motor volume PC Board while pushing it inside of the set.



Adjustment Procedures

■ Power Amplifier Idling Adjustment



1. Before tuning on the power, turn the semi-fixed resistors (R751 for L channel and R752 for R channel) of the power amplifier circuit board fully counterclockwise.
2. Adjust the semi-fixed resistors R751 (for L channel) and R752 (for R channel) so that the voltage between test points A and B of R787 (L channel) and between test point C and D of R788 (R channel) becomes

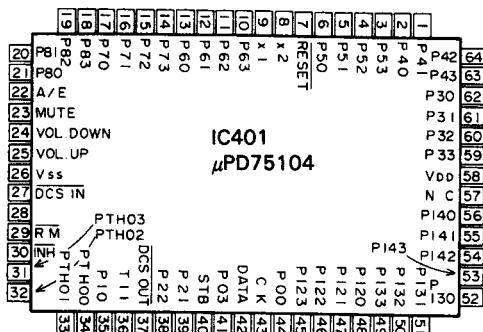
5 mV, about 10 minutes after the power is turned on. Confirm that the voltage does not vary when the heatsink temperature increases further.

Note: Be sure to perform the measurement with the probes and cabinet of the measuring equipment separated from the grounding terminals of AX-R551X BK or other measuring equipment.

Explanation of LSI

■ μ PD75104G525-1B (IC401): System Controller

(1) External Diagram



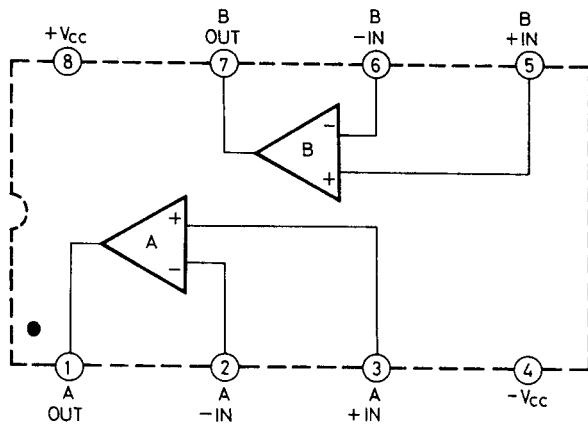
(2) Pin Functions

Pin No.	Symbol	I/O	Terminal Function
1	P41	O	VCR (LED)
2	P40	O	TAPE 1 (LED)
3	P53	O	CD (LED)
4	P52	O	TV (LED)
5	P51	O	TUNER (LED)
6	P50	O	PHONO (LED)
7	RESET	-	—
8	X2	-	—
9	X1	-	—
10	P63	O	KEY OUT
11	P62	O	KEY OUT
12	P61	O	KEY OUT
13	P60	O	KEY OUT
14	P73	-	—
15	P72	-	—
16	P71	-	—
17	P70	-	—
18	P83	O	AC relay ON/OFF
19	P82	-	—
20	P81	O	—
21	P80	O	—
22	P93	O	A/E
23	P92	O	MUTE
24	P91	O	VOL DOWN
25	P90	O	VOL UP
26	Vss	-	—
27	P13/INT3	I	DCS IN
28	P12/INT2	-	—
29	P11/INT1	I	RM IN
30	PIO/INTO	I	INH
31	PTH03	-	—
32	PTH02	-	—

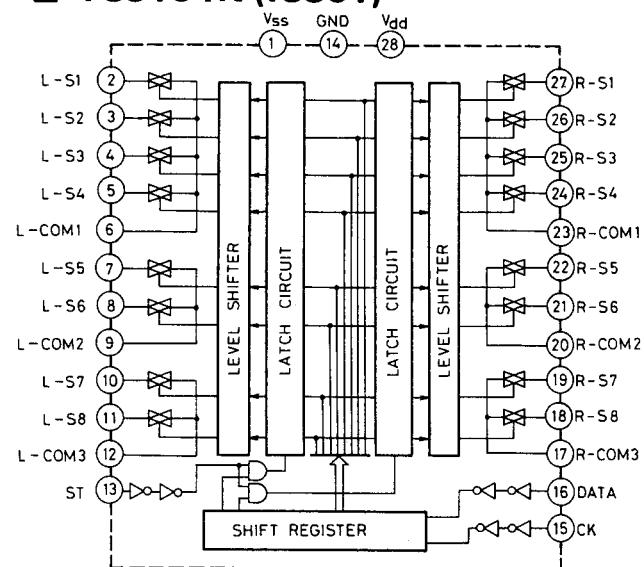
Pin No.	Symbol	I/O	Terminal Function
33	PTH01	-	—
34	PTH00	-	—
35	T10	-	—
36	T11	-	—
37	P23	O	DCS OUT
38	P22	-	—
39	P21	-	—
40	P20/PT00	O	STB
41	P03/S1	-	—
42	P02/S0	O	SI TC9164
43	P01/SCK	O	CK TC9162
44	P00/INT4	-	—
45	P123	I	KEY IN
46	P122	I	KEY IN
47	P121	I	KEY IN
48	P120	I	KEY IN
49	P133	I	KEY IN
50	P132	I	KEY IN
51	P131	I	KEY IN
52	P130	I	KEY IN
53	P143	I	TEST (active H)
54	P142	I	CS3 (preparation)
55	P141	I	CS2 (relay)
56	P140	I	CSI (4/3 RS)
57	NC	-	—
58	Vdd	-	—
59	P33	O	RM IND (LED)
60	P32	O	VOL IND (LED)
61	P31	O	A/E IND (LED)
62	P30	O	TAPE 2 (LED)
63	P43	O	SEA SOURCE (LED)
64	P42	O	SEA REC (LED)

Internal Block Diagrams of ICs

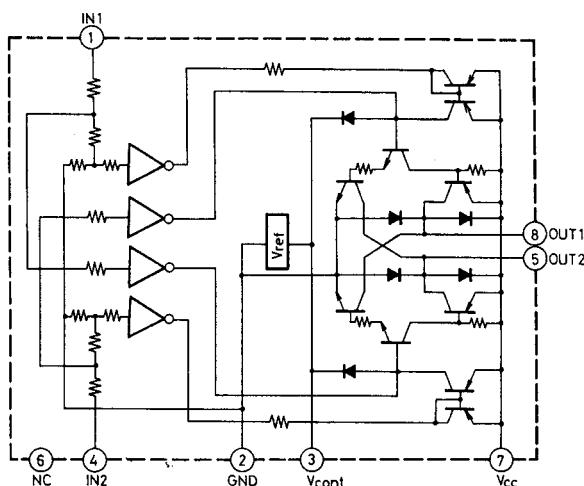
■ NJM4558DD (IC301, IC503) M5218P (IC531, IC582)



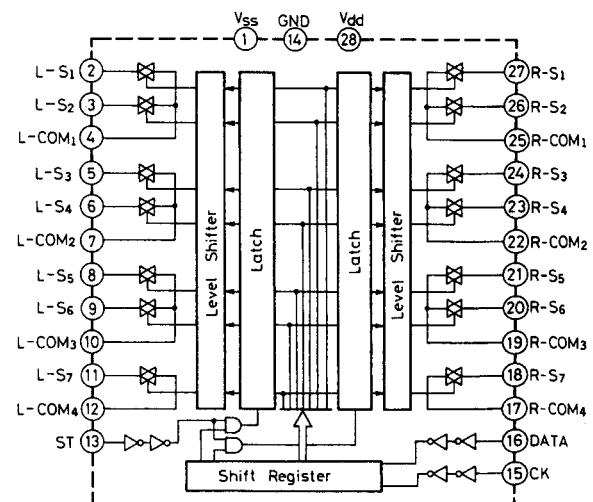
■ TC9164N (IC361)



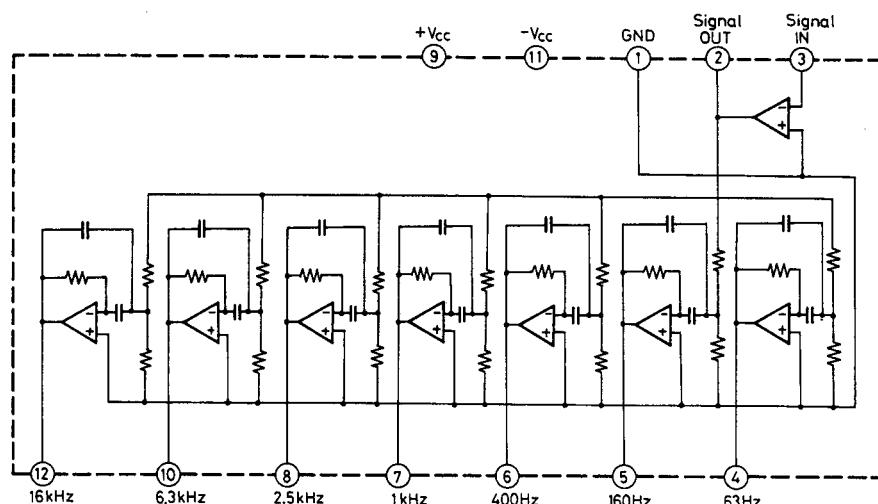
■ LB1639 (IC351)



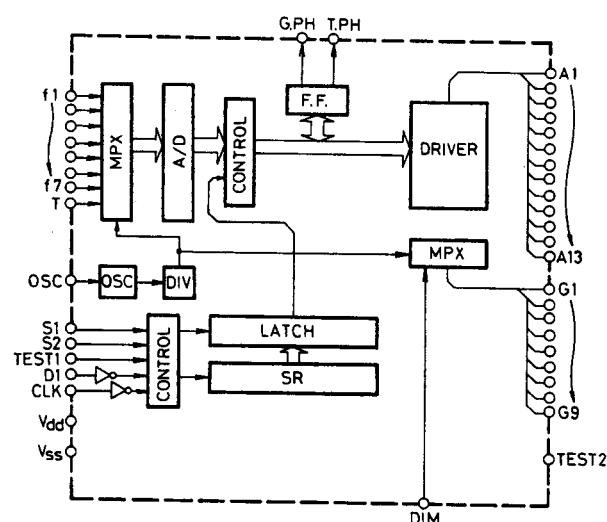
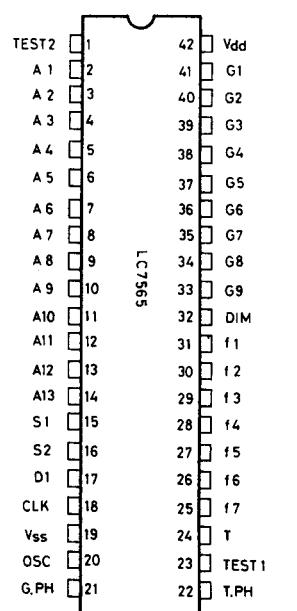
■ TC9162N (IC362)



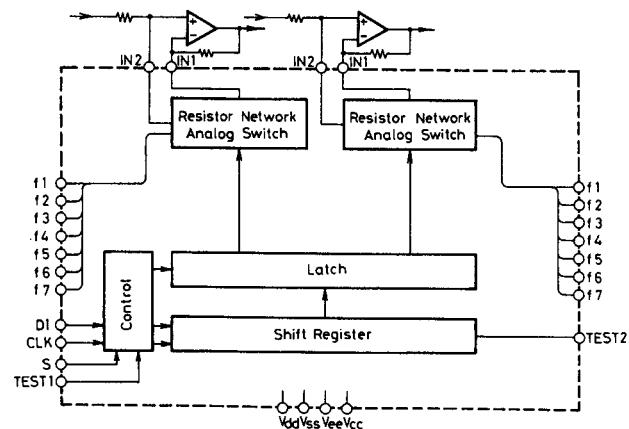
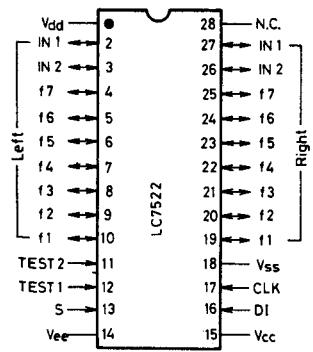
■ 7EL-SPI-001 (IC442)



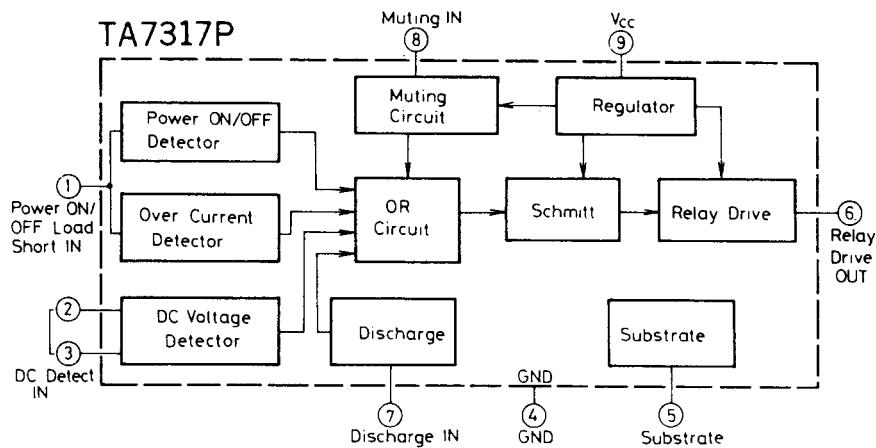
■ LC7565 (IC443)



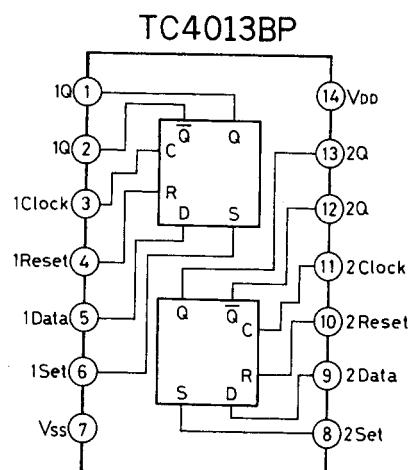
■ LC7522 (IC504)



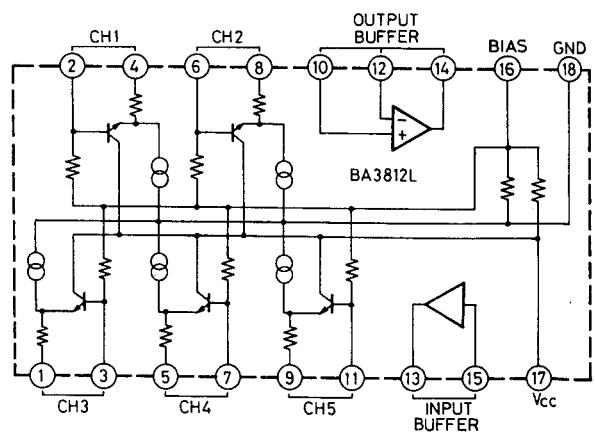
■ TA7317P (IC901)



■ TC4013BP (IC441)



■ BA3812L (IC501, 502)

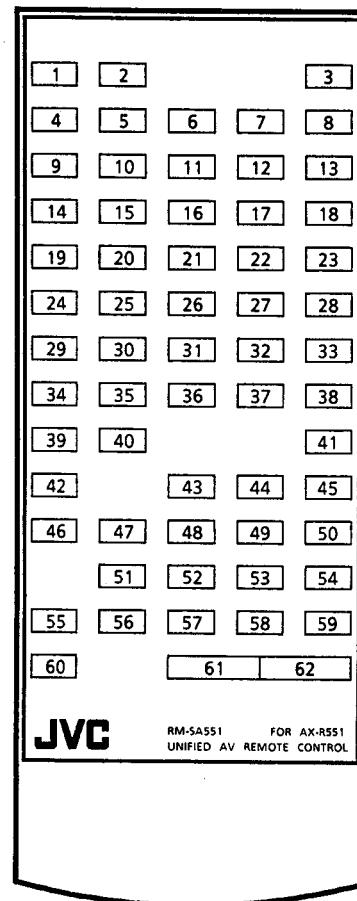


Remote Control Unit (RM-SA551)

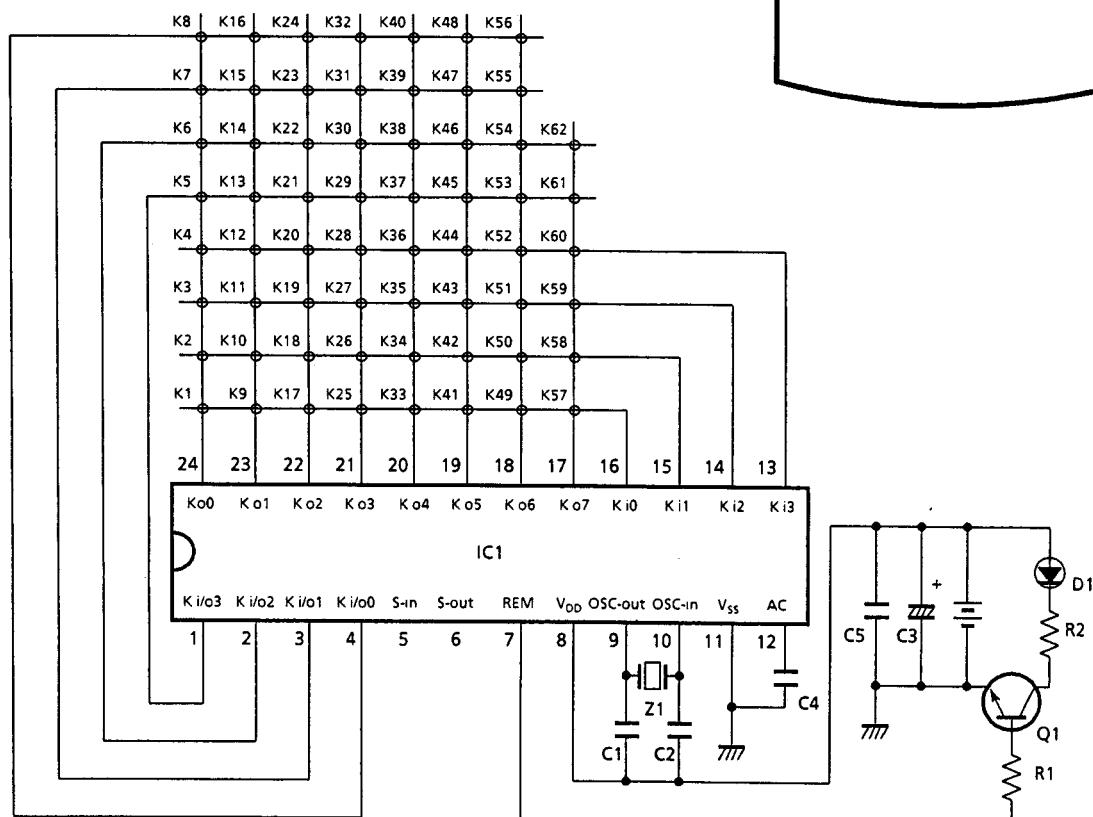
■ Parts List

Symbol	Part Number	Description
IC1	μPD6125AG-551	
Q1	2SC3265(O,Y)	
D1	SE303A-Y	
C1,C2	NSC21HJ-101	100pF
C3	QETB1CM-106	10μF,16V
C4,C5	NCB21HK-104	0.1μF
R1	NRVA82D-270	27Ω,1/8W
R2	NRVA42D-1R0	1.0Ω,1/4W
Z1	ECBS455EB20	455kHz

■ Key Layout



■ Schematic Diagram



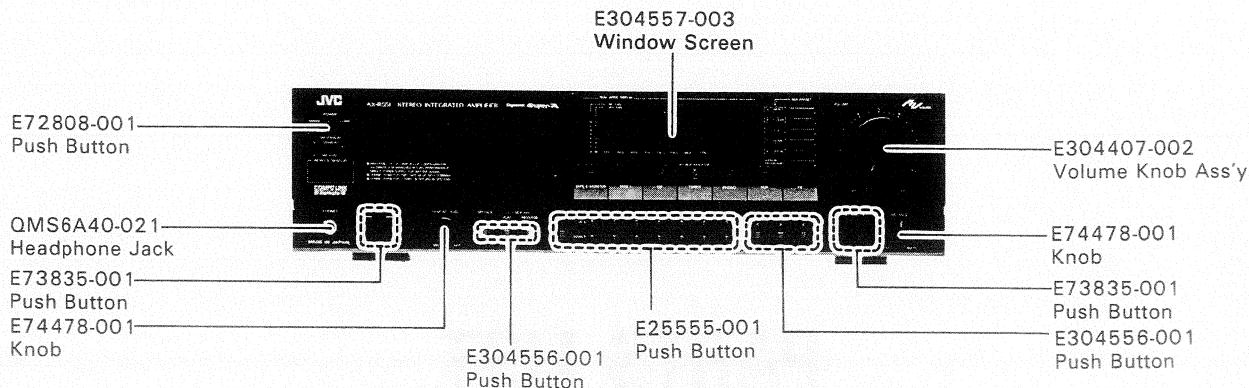
PARTS LIST

Contents

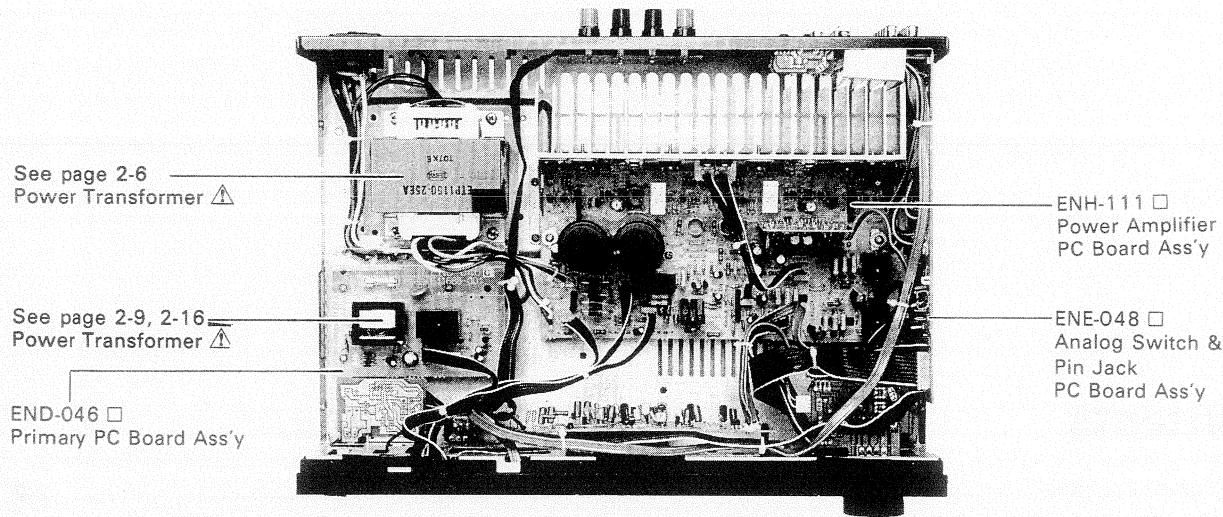
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■ ENE-048 □ Analog Switch & Pin Jack PC Board Ass'y.....	2-11
■ ENB-065 □ Logic & Tact Switch PC Board Ass'y	2-14
■ ENG-004 □ Pre-Drive PC Board Ass'y	2-16
■ END-046 □ Primary PC Board Ass'y.....	2-17
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Main Parts Locations

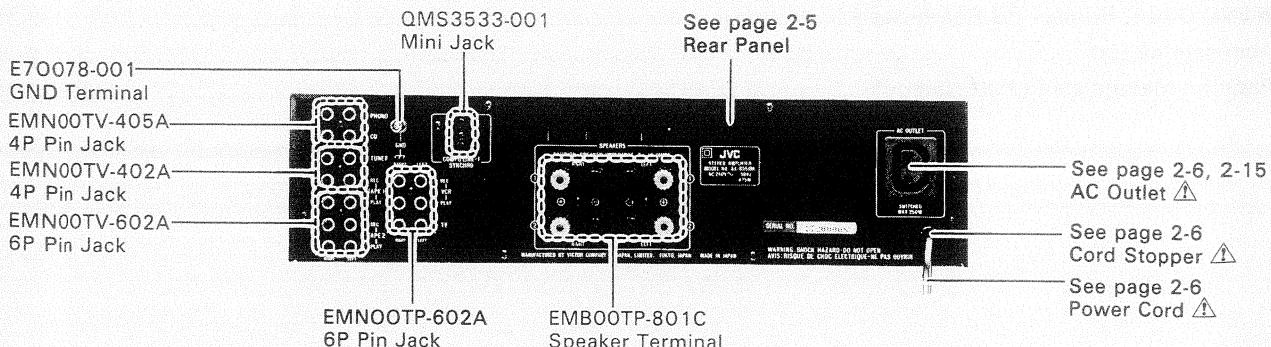
■ Front View



■ Top View

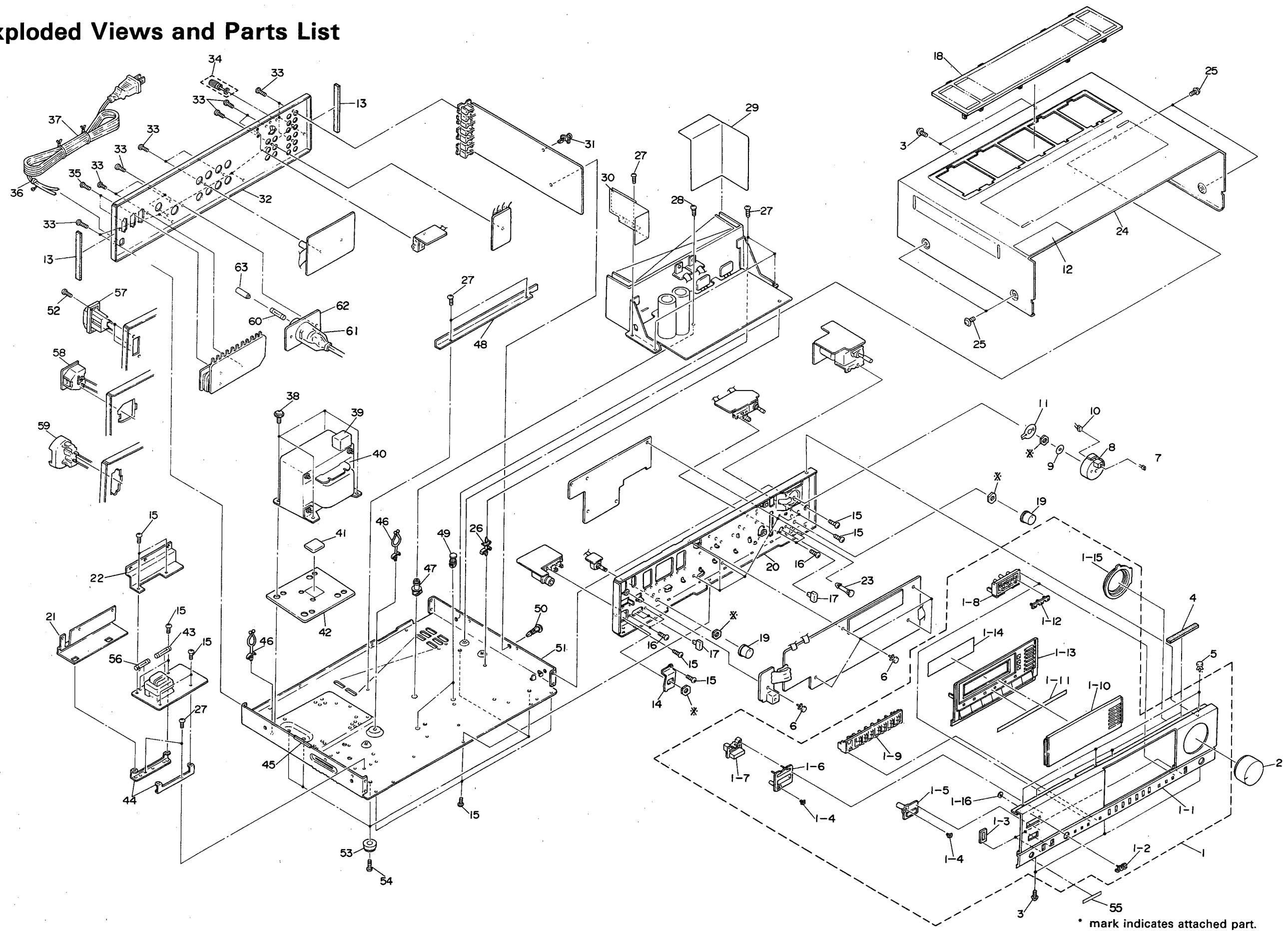


■ Rear View



: Safety Parts

Exploded Views and Parts List



▲	Item	Part Number	Part Name	Q'ty	Description	Areas
	1	EFP-AXR551XBKE	Front Panel Ass'y	1		Except U
	1-1	EFP-AXR551XBKU	Front Panel Ass'y	1		U
		E25552-005	Front Panel	1		Except U
	1-2	E25552-004	Front Panel	1		U
		E72968-001	JVC Mark	1		
	1-3	E73836-002	Push Button Escutcheon	3		
	1-4	E73522-001	Indicator	2		
	1-5	E73509-001	Screen	1		
	1-6	E304591-001	Push Button Escutcheon	1		
	1-7	E72808-001	Push Button	1		
	1-8	E304556-001	Push Button	2		
	1-9	E25555-001	Push Button	1		
	1-10	E304557-003	Window Screen	1		
	1-11	E72437-008	Sheet	1		
	1-12	E73832-001	Indicator	1		
	1-13	E25587-003	FL Escutcheon Ass'y	1		
	1-14	E70561-018	FL Screen	1		
	1-15	E73513-001	Volume Knob Escutcheon	1		
	1-16	E60912-003	Speed Nut	1		
	2	E304407-002	Volume Knob Ass'y	1		
	3	SBSE3008M	Screw	5		
	4	EXO060007N40S	Spacer	3		
	5	E48729-009	Plastic Rivet	3		
	6	E48729-008	Plastic Rivet	5		
	7	SLT-25VR52F	LED	1		
	8	E304320-002	Holder	1		
	9	E74070-001	Spacer	1		
	10	EWS142-004	Socket Wire Ass'y	1		
	11	E73905-001	Sheet	1		
	12	E67000-005	Caution Label	1		
	13	EXO085010R10S	Spacer	2		
	14	E73218-001	Headphone Bracket	1		
	15	SBSB3008N	Screw	12		
	16	SBST3006CC	Screw	4		
	17	E73835-001	Push Button	3		
	18	E23862-005	Grill	1		
	19	E74478-001	Knob	2		E,BS,UE
	20	E11425-001	Front Bracket	1		
	21	E74781-001	Protect Cover	1		
	22	E74782-001	Protect Cover	1		
	23	E303216-004	Fastener	4		
	24	E24742-005	Metal Cover	1		
	25	E24719-012	Metal Cover	1		
	26	E61660-004	Special Screw	4		
		E300167-001	Fastener	1		
	27	SBST3006Z	Screw	8		
	28	GBSB3008CC	Screw	1		
	29	E304758-001	Protect Sheet	1		
	30	E304787-002	Protect Cover	1		
	31	E69384-002	Fastener	1		
	32	E25549-027	Rear Panel	1		U
		E25549-028	Rear Panel	1		UE
		E25549-029	Rear Panel	1		E
		E25549-030	Rear Panel	1		A
		E25549-031	Rear Panel	1		G
	33	E25549-032	Rear Panel	1		BS
		E73273-001	Special Screw	12	Except E,UE,UE	
		E73273-001	Special Screw	14	E	
		E73273-001	Special Screw	16	U,UE	
	34	E70078-001	GND Terminal	1		

▲ Safety Parts

(No. 20113) 2-5

▲	Item	Part Number	Part Name	Q'ty	Description	Areas
	35	SDS83008M	Screw	2		U,UE
	36	QHS3876-162	Cord Stopper	1		Except BS
		QHS3876-162BS	Cord Stopper	1		BS
	37	QMP7600-200	Power Cord	1		U
		QMP7520-200	Power Cord	1		UE
	38	QMP3900-200	Power Cord	1		E,G
		QMP2560-244	Power Cord	1		A
		QMP9017-008BS	Power Cord	1		BS
		E65389-002	Special Screw	4		U,UE
		E65389-005	Special Screw	4		Except U,UE
	39	E3400-375	Spacer	1		
	40	ETP1200-21FA	Power Transformer	1		U
		ETP1150-25UA	Power Transformer	1		UE
		ETP1150-25EA	Power Transformer	1		E,A,G
		ETP1150-25EABS	Power Transformer	1		BS
	41	EXO045045R20S10	Spacer	1		A,E,G,BS
	42	E73603-003	Spacer	1		A,E,G,BS
	43	QMF51A2-3R15S	Fuse	1	F001	E,A,G
		QMF51E2-3R15SBS	Fuse	1	F001	BS
	44	E69902-003	Circuit Board Holder	2		
	45	E65778-002	Spacer	1		
	46	E303704-001	Wire Clamp	1		
	47	E303704-002	Wire Clamp	1		U,UE
	48	E49946-002	Circuit Board Holder	1		Except U,UE
		E303585-001	Bracket	1		
	49	E49383-002	Fastener	2		
	50	E303216-001	Fastener	1		
	51	E10653-013	Chassis Base	1		E,G
	52	SBSB3016M	Screw	2		
	53	E47227-011	Foot	5		
	54	SBSB3008Z	Screw	5		
	55	E49267-001	Origin Marking Label	1		BS
	56	QMF51A2-R10S	Fuse	1	F002	E,A,G
		QMF51A2-R10SBS	Fuse	1	F002	BS
		QMC0240-002	AC Socket	2		E,G
	58	EMC0232-001BS	AC Outlet	1		
	59	EMC0233-001	AC Outlet	1		BS
	60	QMF51A2-1R25S	Fuse	1	F001	A
		QMF51A2-3R15S	Fuse	1	F001	E
		QMF51A2-2R5S	Fuse	1	F001	U
						UE
	61	E69291-001	Fuse Cover	1		
	62	E71073-002	Bracket	1		
	63	QMG0301-003	Fuse Holder	1		

▲ Safety Parts

The Marks for Designated Areas

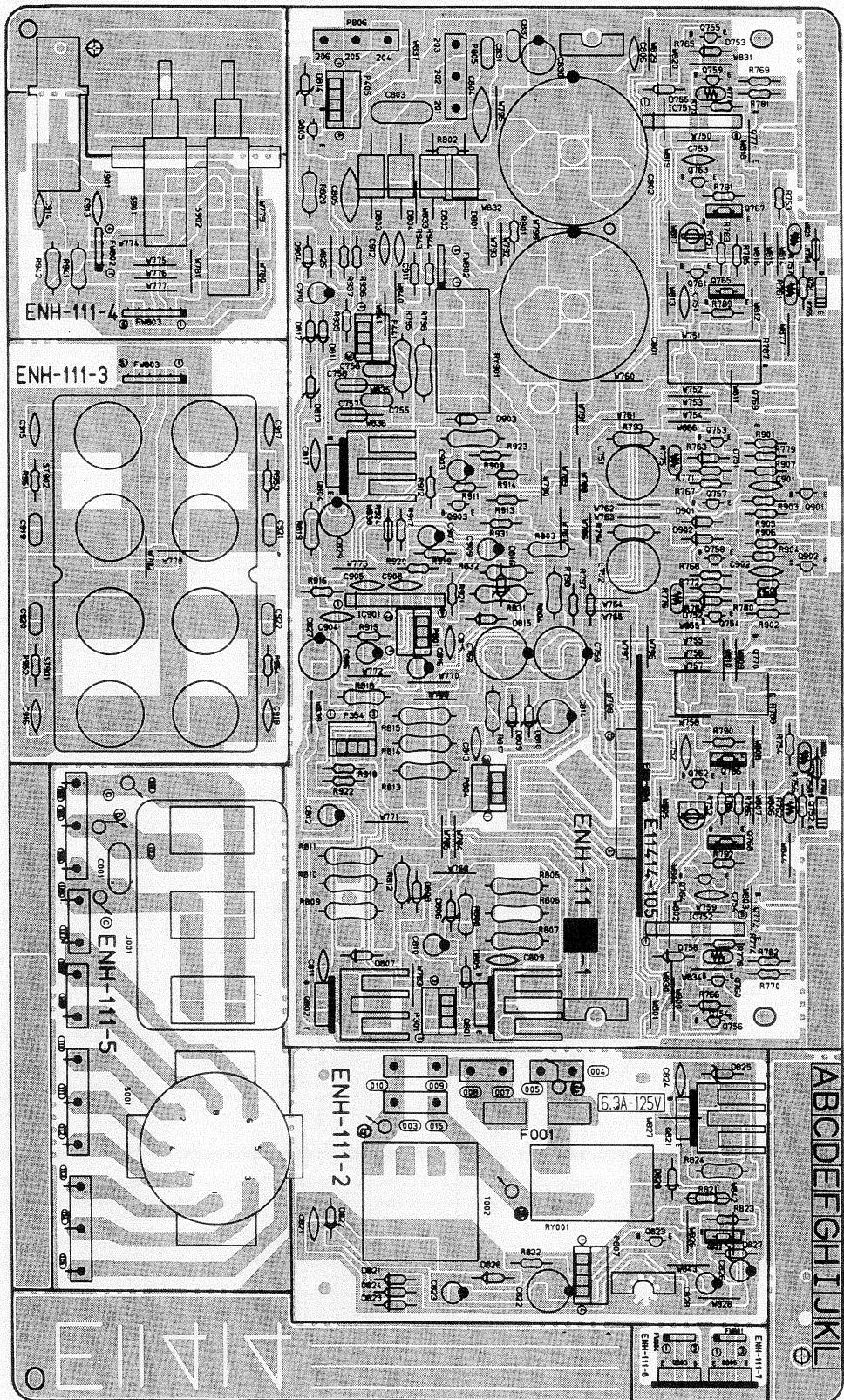
A.....Australia UE.....Saudi Arabia
 E.....Europe U.....Other Countries
 G.....West Germany No mark indicate all areas.
 BS.....the U.K.

2-6 (No. 20113)

Printed Circuit Board Ass'y and Parts List

■ ENH-111 □ Power Amplifier PC Board Ass'y

Note: ENH-111 □ varies according to the areas employed. See note (1) when placing an order.



Note (1)

R Board Ass'y	Designated Areas
ENH-111 B	Other Countries
ENH-111 D	the U.K., Europe, Australia
ENH-111 E	West Germany
ENH-111 G	Saudi Arabia

Transistors

△	ITEM	PART NUMBER	DESCRIPTION	AREA	MAKER
				MAKER	
	Q751	2SD636(Q,R)	SILICON	MATSUSHITA	
	Q752	2SD636(Q,R)	SILICON	MATSUSHITA	D
	Q753	2SC1740LN(R,S)	SILICON	ROHM	E
	Q753	2SC1740LN(R,S)	SILICON	ROHM	G
	Q753	2SC1740LN(R,S)	SILICON	ROHM	G
	Q754	2SC1740LN(R,S)	SILICON	ROHM	D
	Q754	2SC1740LN(R,S)	SILICON	ROHM	E
	Q754	2SC1740LN(R,S)	SILICON	ROHM	G
	Q755	2SA933LN(R,S)	SILICON	ROHM	D
	Q755	2SA933LN(R,S)	SILICON	ROHM	E
	Q755	2SA933LN(R,S)	SILICON	ROHM	G
	Q756	2SA933LN(R,S)	SILICON	ROHM	D
	Q756	2SA933LN(R,S)	SILICON	ROHM	E
	Q756	2SA933LN(R,S)	SILICON	ROHM	G
	Q757	2SC1740LN(R,S)	SILICON	ROHM	B
	Q757	2SC1740LN(R,S)	SILICON	ROHM	D
	Q757	2SC1740LN(R,S)	SILICON	ROHM	E
	Q758	2SC2389(S,E)	SILICON	ROHM	G
	Q758	2SC1740LN(R,S)	SILICON	ROHM	B
	Q758	2SC1740LN(R,S)	SILICON	ROHM	D
	Q758	2SC1740LN(R,S)	SILICON	ROHM	E
	Q758	2SC2389(S,E)	SILICON	ROHM	G
	Q759	2SA1038(S,E)	SILICON	ROHM	G
	Q759	2SA933LN(R,S)	SILICON	ROHM	B
	Q759	2SA933LN(R,S)	SILICON	ROHM	D
	Q759	2SA933LN(R,S)	SILICON	ROHM	E
	Q760	2SA1038(S,E)	SILICON	ROHM	G
	Q760	2SA933LN(R,S)	SILICON	ROHM	B
	Q760	2SA933LN(R,S)	SILICON	ROHM	D
	Q760	2SA933LN(R,S)	SILICON	ROHM	E
	Q761	2SC2389(S)	SILICON	ROHM	
	Q762	2SC2389(S)	SILICON	ROHM	
	Q763	2SA1038(S)	SILICON	ROHM	
	Q764	2SA1038(S)	SILICON	ROHM	
	Q765	2SC2235(D,Y)	SILICON	TOSHIBA	D
	Q765	2SC2235(D,Y)	SILICON	TOSHIBA	E
	Q765	2SC2235(D,Y)	SILICON	TOSHIBA	G
	Q765	2SC2235(D,Y)	SILICON	TOSHIBA	G
	Q766	2SC2235(D,Y)	SILICON	TOSHIBA	D
	Q766	2SC2235(D,Y)	SILICON	TOSHIBA	E
	Q766	2SC2235(D,Y)	SILICON	TOSHIBA	G
	Q766	2SC2235(D,Y)	SILICON	TOSHIBA	G
	Q766	2SD669A(B,C)	SILICON	HITACHI	B
	Q767	2SA965(D,Y)	SILICON	TOSHIBA	D
	Q767	2SA965(D,Y)	SILICON	TOSHIBA	E
	Q767	2SA965(D,Y)	SILICON	TOSHIBA	G
	Q767	2SB649A(B,C)	SILICON	HITACHI	B
	Q768	2SA965(D,Y)	SILICON	TOSHIBA	D
	Q768	2SA965(D,Y)	SILICON	TOSHIBA	E
	Q768	2SA965(D,Y)	SILICON	TOSHIBA	G
	Q768	2SB649A(B,C)	SILICON	HITACHI	B
	Q769	2SC3181NLB(D,R)	SILICON	TOSHIBA	D
	Q769	2SC3181NLB(D,R)	SILICON	TOSHIBA	E
	Q769	2SC3181NLB(D,R)	SILICON	TOSHIBA	G
	Q769	2SD1718BC(PSQ)	SILICON	TOSHIBA	D
	Q770	2SC3181NLB(D,R)	SILICON	TOSHIBA	D
	Q770	2SC3181NLB(D,R)	SILICON	TOSHIBA	E
	Q770	2SD1718BC(PSQ)	SILICON	TOSHIBA	G
	Q771	2SA1264NLB(D,R)	SILICON	TOSHIBA	D
	Q771	2SA1264NLB(D,R)	SILICON	TOSHIBA	E
	Q771	2SA1264NLB(D,R)	SILICON	TOSHIBA	G
	Q771	2SA1264NLB(D,R)	SILICON	TOSHIBA	G
	Q771	2SB1163BC(PSQ)	SILICON	TOSHIBA	B
	Q772	2SA1264NLB(D,R)	SILICON	TOSHIBA	D
	Q772	2SA1264NLB(D,R)	SILICON	TOSHIBA	E
	Q772	2SA1264NLB(D,R)	SILICON	TOSHIBA	G
	Q772	2SB1163BC(PSQ)	SILICON	TOSHIBA	B
	Q801	2SD1666(R,S)	SILICON	SANYO	
	Q802	2SD1666(R,S)	SILICON	SANYO	
	Q803	2SB1133(R,S)	SILICON	SANYO	
	Q804	2SB1133(R,S)	SILICON	SANYO	

Transistors

△	ITEM	PART NUMBER	DESCRIPTION	AREA	MAKER
	Q805	2SA564A(Q,R)	SILICON	MATSUSHITA	
	Q806	2SD1666(R,S)	SILICON	SANYO	
	Q821	2SD1265A(O)	SILICON	MATSUSHITA	B
	Q821	2SD1265A(O)	SILICON	MATSUSHITA	G
	Q822	2SC2235(O,Y)	SILICON	TOSHIBA	B
	Q823	DTC114YN	SILICON	ROHM	B
	Q901	2SC2389(S,E)	SILICON	ROHM	B
	Q902	2SC2389(S,E)	SILICON	ROHM	G
	Q903	2SA1038(S,E)	SILICON	ROHM	

I.C.s

△	ITEM	PART NUMBER	DESCRIPTION	AREA	MAKER
	IC751	VC5022-2	I.C.	SANYO	D
	IC751	VC5022-2	I.C.	SANYO	E
	IC751	VC5022-2	I.C.	SANYO	G
	IC752	VC5022-2	I.C.	SANYO	D
	IC752	VC5022-2	I.C.	SANYO	E
	IC752	VC5022-2	I.C.	SANYO	G
	IC901	TA7317P	I.C.	TOSHIBA	

Diodes

△	ITEM	PART NUMBER	DESCRIPTION	AREA	MAKER
	D751	1S2473	SILICON	ROHM	B
	D752	1S2473	SILICON	ROHM	B
	D753	1S2473	SILICON	ROHM	B
	D754	1S2473	SILICON	ROHM	B
	D755	1S2473	SILICON	ROHM	D
	D755	1S2473	SILICON	ROHM	E
	D755	1S2473	SILICON	ROHM	G
	D756	1S2473	SILICON	ROHM	D
	D756	1S2473	SILICON	ROHM	E
	D756	1S2473	SILICON	ROHM	G
	D756	1S2473	SILICON	ROHM	G
	D801	30DF2SFC	SILICON	NIHONINTER	
	D802	30DF2SFC	SILICON	NIHONINTER	
	D803	30DF2SFC	SILICON	NIHONINTER	
	D804	30DF2SFC	SILICON	NIHONINTER	
	D805	1S2473	SILICON	ROHM	
	D806	RD16EB3	ZENER	NEC	
	D807	1S2473	SILICON	ROHM	
	D808	RD5.6EB3	ZENER	NEC	
	D809	1S2473	SILICON	ROHM	
	D810	RD16EB3	ZENER	NEC	
	D811	1S2473	SILICON	ROHM	
	D812	RD15EB3	ZENER	NEC	
	D813	RD15EB3	ZENER	NEC	
	D814	RD6.8EB3	ZENER	NEC	
	D815	1S2473	SILICON	ROHM	
	D816	RD5.6EB3	ZENER	NEC	
	D821	11E2	SILICON	NIHONINTER	B
	D821	11E2	SILICON	NIHONINTER	G
	D822	11E2	SILICON	NIHONINTER	B
	D822	11E2	SILICON	NIHONINTER	G
	D823	11E2	SILICON	NIHONINTER	B
	D824	11E2	SILICON	NIHONINTER	B
	D824	11E2	SILICON	NIHONINTER	G
	D825	RD12EB3	ZENER	NEC	
	D825	RD12EB3	ZENER	NEC	
	D826	1S2473	SILICON	ROHM	B
	D826	1S2473	SILICON	ROHM	G
	D827	RD6.2EB3	ZENER	NEC	B
	D827	RD6.2EB3	ZENER	NEC	G
	D828	1S2473	SILICON	ROHM	B
	D828	1S2473	SILICON	ROHM	G
	D901	1S2473	SILICON	ROHM	
	D902	1S2473	SILICON	ROHM	
	D903	1S2473	SILICON	ROHM	
	D904	1S2473	SILICON	ROHM	

△ : SAFETY PARTS

Capacitors

△	ITEM	PART NUMBER	DESCRIPTION			AREA
	C001	Q CZ9019-472	4700PF		CERAMIC	B
	C001	Q CZ9019-472	4700PF		CERAMIC	G
	C751	QCS22HJ-470A	47PF	500V	CERAMIC	B
	C751	QCS22HJ-470A	47PF	500V	CERAMIC	D
	C751	QCS22HJ-470A	47PF	500V	CERAMIC	G
	C751	QCS22HJ-680A	68PF	500V	CERAMIC	E
	C752	QCS22HJ-470A	47PF	500V	CERAMIC	B
	C752	QCS22HJ-470A	47PF	500V	CERAMIC	D
	C752	QCS22HJ-470A	47PF	500V	CERAMIC	G
	C752	QCS22HJ-680A	68PF	500V	CERAMIC	E
	C753	QCS22HJ-470A	47PF	500V	CERAMIC	B
	C753	QCS22HJ-470A	47PF	500V	CERAMIC	D
	C753	QCS22HJ-470A	47PF	500V	CERAMIC	G
	C753	QCS22HJ-680A	68PF	500V	CERAMIC	E
	C754	QCS22HJ-470A	47PF	500V	CERAMIC	B
	C754	QCS22HJ-470A	47PF	500V	CERAMIC	D
	C754	QCS22HJ-680A	68PF	500V	CERAMIC	E
	C755	QFN81HK-473	0.047MF	50V	MYLAR	
	C756	QFN81HK-473	0.047MF	50V	MYLAR	
	C757	QFN81HK-473	0.047MF	50V	MYLAR	
	C758	QFN81HK-473	0.047MF	50V	MYLAR	
	C759	QETB1JM-107	100MF	63V	ELECTRO	D
	C759	QETB1JM-107	100MF	63V	ELECTRO	E
	C759	QETB2AM-107	100MF	100V	ELECTRO	B
	C759	QETB2AM-107	100MF	100V	ELECTRO	G
	C760	QETB1JM-107	100MF	63V	ELECTRO	D
	C760	QETB1JM-107	100MF	63V	ELECTRO	E
	C760	QETB2AM-107	100MF	100V	ELECTRO	B
	C760	QETB2AM-107	100MF	100V	ELECTRO	G
	C801	EEZ7101-129E	12000MF	71V	ELECTRO	B
	C801	EEZ7101-109	10000MF	71V	ELECTRO	D
	C801	EEZ7101-109	10000MF	71V	ELECTRO	E
	C801	EEZ7101-109	10000MF	71V	ELECTRO	G
	C802	EEW7101-129E	12000MF	71V	ELECTRO	
	C802	EEZ7101-109	10000MF	71V	ELECTRO	D
	C802	EEZ7101-109	10000MF	71V	ELECTRO	E
	C803	QFH42EK-104	0.1MF	250V	M. MYLAR	
	C806	QCF21HP-223	0.022MF	50V	CERAMIC	E
	C809	QCF21HP-472	4700PF	50V	CERAMIC	
	C810	QETB1EM-227	220MF	25V	ELECTRO	
	C811	QCF21HP-472	4700PF	50V	CERAMIC	
	C812	QETB1HM-107	100MF	16V	ELECTRO	
	C813	QCF21HP-472	4700PF	50V	CERAMIC	
	C814	QETB1EM-227	220MF	25V	ELECTRO	
	C815	QFM82AJ-472	4700PF	100V	MYLAR	
	C816	QETB1CM-476	47MF	16V	ELECTRO	
	C817	QCF21HP-472	4700PF	50V	CERAMIC	
	C821	QFM82AK-473	0.047MF	100V	MYLAR	B
	C821	QFM82AK-473	0.047MF	100V	MYLAR	G
	C822	QETB1JM-227	220MF	63V	ELECTRO	B
	C822	QETB1JM-227	220MF	63V	ELECTRO	G
	C823	QETB1HM-105	1MF	50V	ELECTRO	B
	C823	QETB1HM-105	1MF	50V	ELECTRO	G
	C824	QCF21HP-472	4700PF	50V	CERAMIC	B
	C824	QCF21HP-472	4700PF	50V	CERAMIC	G
	C826	QETB1CM-476	47MF	16V	ELECTRO	B
	C826	QETB1CM-476	47MF	16V	ELECTRO	G
	C827	QETB0JM-108	1000MF	6.3V	ELECTRO	
	C828	QETB1AM-107	100MF	10V	ELECTRO	B
	C828	QETB1AM-107	100MF	10V	ELECTRO	G
	C830	QETB1HM-107	100MF	50V	ELECTRO	
	C831	QFN42AK-103	0.01MF	100V	MYLAR	
	C832	QFN42AK-103	0.01MF	100V	MYLAR	
	C901	QCF21HP-223	0.022MF	50V	CERAMIC	
	C902	QCF21HP-223	0.022MF	50V	CERAMIC	
	C903	QETB1EM-226	22MF	25V	ELECTRO	
	C904	QCF21HP-223	0.022MF	50V	CERAMIC	
	C905	QCY21HK-102	1000PF	50V	CERAMIC	
	C906	QETB1AM-476	47MF	10V	ELECTRO	
	C907	QETB2AM-474	0.47MF	100V	ELECTRO	
	C908	QFN81HK-153	0.015MF	50V	MYLAR	
	C909	QETB1CM-226	22MF	16V	ELECTRO	
	C910	QETB1HM-105	1MF	50V	ELECTRO	
	C913	QCS21HJ-331	330PF	50V	CERAMIC	E
	C914	QCS21HJ-331	330PF	50V	CERAMIC	E
	C919	QFN81HK-103	0.01MF	50V	MYLAR	E
	C920	QFN81HK-103	0.01MF	50V	MYLAR	E
	C921	QFN81HK-103	0.01MF	50V	MYLAR	E
	C922	QFN81HK-103	0.01MF	50V	MYLAR	E

Resistors

△	ITEM	PART NUMBER	DESCRIPTION			AREA
	R751	QVPC604-471	470	0.3W	VARIABLE	
	R752	QVPC604-471	470	0.3W	VARIABLE	
	R753	QRD148J-101S	100	1/4W	CARBON	D
	R753	QRD148J-101S	100	1/4W	CARBON	G
	R753	QRD148J-101S	100	1/4W	CARBON	
	R753	QRD148J-152S	1.5K	1/4W	CARBON	B
	R754	QRD148J-101S	100	1/4W	CARBON	D
	R754	QRD148J-101S	100	1/4W	CARBON	E
	R754	QRD148J-101S	100	1/4W	CARBON	G
	R754	QRD148J-152S	1.5K	1/4W	CARBON	B
	R755	QRD148J-391S	390	1/4W	CARBON	
	R756	QRD148J-391S	390	1/4W	CARBON	
	R757	ERT-D2WFL351S	350	1/4W	Thermistor	D
	R757	ERT-D2WFL351S	350	1/4W	Thermistor	E
	R757	ERT-D2WFL351S	350	1/4W	Thermistor	G
	R758	ERT-D2WFL351S	350	1/4W	Thermistor	D
	R758	ERT-D2WFL351S	350	1/4W	Thermistor	E
	R758	ERT-D2WFL351S	350	1/4W	Thermistor	G
	R759	QRD148J-471S	470	1/4W	CARBON	
	R759	QRD148J-471S	470	1/4W	CARBON	
	R760	QRD148J-471S	470	1/4W	CARBON	D
	R760	QRD148J-471S	470	1/4W	CARBON	E
	R760	QRD148J-471S	470	1/4W	CARBON	G
	R761	SDT250			Thermistor	D
	R761	SDT250			Thermistor	E
	R762	SDT250			Thermistor	D
	R762	SDT250			Thermistor	E
	R762	SDT250			Thermistor	G
	R763	QRD148J-102S	1K	1/4W	CARBON	D
	R763	QRD148J-102S	1K	1/4W	CARBON	E
	R763	QRD148J-102S	1K	1/4W	CARBON	G
	R764	QRD148J-102S	1K	1/4W	CARBON	D
	R764	QRD148J-102S	1K	1/4W	CARBON	E
	R764	QRD148J-102S	1K	1/4W	CARBON	G
	R765	QRD148J-102S	1K	1/4W	CARBON	D
	R765	QRD148J-102S	1K	1/4W	CARBON	E
	R765	QRD148J-102S	1K	1/4W	CARBON	G
	R766	QRD148J-102S	1K	1/4W	CARBON	D
	R766	QRD148J-102S	1K	1/4W	CARBON	E
	R766	QRD148J-102S	1K	1/4W	CARBON	G
	R767	QRD148J-101S	100	1/4W	CARBON	D
	R767	QRD148J-101S	100	1/4W	CARBON	E
	R767	QRD148J-101S	100	1/4W	CARBON	G
	R767	QRD148J-151S	150	1/4W	CARBON	B
	R768	QRD148J-101S	100	1/4W	CARBON	D
	R768	QRD148J-101S	100	1/4W	CARBON	E
	R768	QRD148J-101S	100	1/4W	CARBON	G
	R768	QRD148J-151S	150	1/4W	CARBON	B
	R769	QRD148J-101S	100	1/4W	CARBON	D
	R769	QRD148J-101S	100	1/4W	CARBON	E
	R769	QRD148J-151S	150	1/4W	CARBON	B
	R770	QRD148J-101S	100	1/4W	CARBON	
	R770	QRD148J-101S	100	1/4W	CARBON	
	R770	QRD148J-151S	150	1/4W	CARBON	
	R771	QRD148J-131S	130	1/4W	CARBON	D
	R771	QRD148J-131S	130	1/4W	CARBON	E
	R771	QRD148J-131S	130	1/4W	CARBON	G
	R772	QRD148J-131S	130	1/4W	CARBON	D
	R772	QRD148J-131S	130	1/4W	CARBON	E
	R772	QRD148J-131S	130	1/4W	CARBON	G
	R773	QRD148J-131S	130	1/4W	CARBON	D
	R773	QRD148J-131S	130	1/4W	CARBON	E
	R773	QRD148J-131S	130	1/4W	CARBON	G
	R774	QRD148J-131S	130	1/4W	CARBON	D
	R774	QRD148J-131S	130	1/4W	CARBON	E
	R774	QRD148J-131S	130	1/4W	CARBON	G
	R775	ERT-D2WFL351S	350	1/4W	Thermistor	D
	R775	ERT-D2WFL351S	350	1/4W	Thermistor	E
	R775	ERT-D2WFL351S	350	1/4W	Thermistor	G
	R776	ERT-D2WFL351S	350	1/4W	Thermistor	D
	R776	ERT-D2WFL351S	350	1/4W	Thermistor	E
	R776	ERT-D2WFL351S	350	1/4W	Thermistor	G
	R777	ERT-D2WFL351S	350	1/4W	Thermistor	D
	R777	ERT-D2WFL351S	350	1/4W	Thermistor	E
	R777	ERT-D2WFL351S	350	1/4W	Thermistor	G
	R778	ERT-D2WFL351S	350	1/4W	Thermistor	D
	R778	ERT-D2WFL351S	350	1/4W	Thermistor	E
	R778	ERT-D2WFL351S	350	1/4W	Thermistor	G
	R779	QRD148J-121S	120	1/4W	CARBON	D
	R779	QRD148J-121S	120	1/4W	CARBON	E
	R779	QRD148J-121S	120	1/4W	CARBON	G

△ : SAFETY PARTS

Resistors

△	ITEM	PART NUMBER	DESCRIPTION	AREA
	R779	QRD148J-331S	330 1/4W CARBON	B
	R780	QRD148J-121S	120 1/4W CARBON	D
	R780	QRD148J-121S	120 1/4W CARBON	E
	R780	QRD148J-121S	120 1/4W CARBON	G
	R780	QRD148J-331S	330 1/4W CARBON	B
	R781	QRD148J-121S	120 1/4W CARBON	D
	R781	QRD148J-121S	120 1/4W CARBON	E
	R781	QRD148J-121S	120 1/4W CARBON	G
	R781	QRD148J-331S	330 1/4W CARBON	B
	R782	QRD148J-121S	120 1/4W CARBON	D
	R782	QRD148J-121S	120 1/4W CARBON	E
	R782	QRD148J-121S	120 1/4W CARBON	G
△	R783	QRD145J-272S	2.7K 1/4W UNF.CARBON	B
△	R784	QRD145J-272S	2.7K 1/4W UNF.CARBON	
△	R785	QRD145J-271S	270 1/4W UNF.CARBON	
△	R786	QRD145J-271S	270 1/4W UNF.CARBON	
△	R787	ERFO32K-R22	0.22 3W CEMENT	
△	R788	ERFO32K-R22	0.22 3W CEMENT	
△	R789	QRD145J-100S	10 1/4W UNF.CARBON	
△	R790	QRD145J-100S	10 1/4W UNF.CARBON	
△	R791	QRD145J-100S	10 1/4W UNF.CARBON	
△	R792	QRD145J-100S	10 1/4W UNF.CARBON	
△	R793	QRD125J-330	33 1/2W UNF.CARBON	B
△	R793	QRD125J-330	33 1/2W UNF.CARBON	D
△	R793	QRD125J-330	33 1/2W UNF.CARBON	G
△	R793	QRD125J-470	47 1/2W UNF.CARBON	E
△	R794	QRD125J-330	33 1/2W UNF.CARBON	B
△	R794	QRD125J-330	33 1/2W UNF.CARBON	D
△	R794	QRD125J-330	33 1/2W UNF.CARBON	G
△	R794	QRD125J-470	47 1/2W UNF.CARBON	E
△	R795	QRG022J-100A	10 2W O.M.FILM	
△	R796	QRG022J-100A	10 2W O.M.FILM	
△	R797	QRD145J-330S	33 1/4W UNF.CARBON	
△	R798	QRD145J-330S	33 1/4W UNF.CARBON	
R801	QRD148J-333S	33K 1/4W CARBON		
△	R802	QRD148J-333S	33K 1/4W CARBON	
△	R803	QRD125J-4R7	4.7 1/2W UNF.CARBON	
△	R804	QRD125J-220	22 1/2W UNF.CARBON	
△	R805	QRG022J-152A	1.5K 2W O.M.FILM	
△	R806	QRG022J-152A	1.5K 2W O.M.FILM	
△	R807	QRG022J-152A	1.5K 2W O.M.FILM	
△	R808	QRD125J-822	8.2K 1/2W UNF.CARBON	
△	R809	QRG022J-222A	2.2K 2W O.M.FILM	D
△	R809	QRG022J-222A	2.2K 2W O.M.FILM	G
△	R810	QRG022J-222A	2.2K 2W O.M.FILM	D
△	R810	QRG022J-222A	2.2K 2W O.M.FILM	E
△	R810	QRG022J-222A	2.2K 2W O.M.FILM	G
△	R810	QRG022J-561A	560 2W O.M.FILM	B
△	R811	QRG022J-222A	2.2K 2W O.M.FILM	D
△	R811	QRG022J-222A	2.2K 2W O.M.FILM	E
△	R811	QRG022J-222A	2.2K 2W O.M.FILM	G
△	R811	QRG022J-561A	560 2W O.M.FILM	B
△	R812	QRD125J-123	12K 1/2W UNF.CARBON	
△	R813	QRG022J-122A	1.2K 2W O.M.FILM	D
△	R813	QRG022J-122A	1.2K 2W O.M.FILM	E
△	R813	QRG022J-122A	1.2K 2W O.M.FILM	G
△	R813	QRG022J-152A	1.5K 2W O.M.FILM	B
△	R814	QRG022J-122A	1.2K 2W O.M.FILM	D
△	R814	QRG022J-122A	1.2K 2W O.M.FILM	E
△	R814	QRG022J-122A	1.2K 2W O.M.FILM	G
△	R814	QRG022J-152A	1.5K 2W O.M.FILM	B
△	R815	QRG022J-122A	1.2K 2W O.M.FILM	D
△	R815	QRG022J-122A	1.2K 2W O.M.FILM	E
△	R815	QRG022J-152A	1.5K 2W O.M.FILM	B
△	R817	QRD125J-822	8.2K 1/2W UNF.CARBON	
△	R818	QRD125J-820	82 1/2W UNF.CARBON	
△	R819	QRD125J-562	5.6K 1/2W UNF.CARBON	
△	R820	QRD125J-470	47 1/2W UNF.CARBON	
△	R821	QRD145J-3R3S	3.3 1/4W UNF.CARBON	B
△	R821	QRD145J-3R3S	3.3 1/4W UNF.CARBON	G
R822	QRD148J-472S	4.7K 1/4W CARBON	B	
R822	QRD148J-472S	4.7K 1/4W CARBON	G	
R823	QRD148J-821S	820 1/4W CARBON	B	
R823	QRD148J-821S	820 1/4W CARBON	G	
△	R824	QRG012J-222A	2.2K 1W O.M.FILM	B
△	R824	QRG012J-222A	2.2K 1W O.M.FILM	G
△	R825	QRG012J-220A	22 1W O.M.FILM	
△	R826	QRD125J-183	18K 1/2W UNF.CARBON	
R901	QRD148J-681S	680 1/4W CARBON		
R902	QRD148J-681S	680 1/4W CARBON		
R903	QRD148J-562S	5.6K 1/4W CARBON		

Resistors

△	ITEM	PART NUMBER	DESCRIPTION	AREA
	R904	QRD148J-562S	5.6K 1/4W CARBON	
	R905	QRD148J-123S	12K 1/4W CARBON	
	R906	QRD148J-123S	12K 1/4W CARBON	
	R907	QRD148J-152S	1.5K 1/4W CARBON	
	R908	QRD148J-152S	1.5K 1/4W CARBON	
	R909	QRD148J-103S	10K 1/4W CARBON	
	R911	QRD148J-332S	3.3K 1/4W CARBON	
	R912	QRD148J-473S	47K 1/4W CARBON	
	R913	QRD148J-104S	100K 1/4W CARBON	
	R914	QRD148J-823S	82K 1/4W CARBON	
	R915	QRD148J-473S	47K 1/4W CARBON	
	R916	QRD148J-563S	56K 1/4W CARBON	
	R917	QRD148J-683S	68K 1/4W CARBON	
	R918	QRD148J-392S	3.9K 1/4W CARBON	
	R919	QRD148J-392S	3.9K 1/4W CARBON	
	R920	QRD148J-333S	33K 1/4W CARBON	
	R921	QRD148J-224S	220K 1/4W CARBON	
	R922	QRD148J-562S	5.6K 1/4W CARBON	
△	R923	QRG022J-182A	1.8K 2W O.M.FILM	
	R924	QRD148J-181S	180 1/4W CARBON	B
	R924	QRD148J-330S	33 1/4W CARBON	D
	R924	QRD148J-330S	33 1/4W CARBON	G
△	R931	QRD145J-470S	47 1/4W UNF.CARBON	
	R935	QRD148J-822S	8.2K 1/4W CARBON	
	R936	QRD148J-682S	6.8K 1/4W CARBON	
	R937	QRD148J-472S	4.7K 1/4W CARBON	
△	R941	QRG022J-471A	470 2W O.M.FILM	
△	R942	QRG022J-471A	470 2W O.M.FILM	
	R943	QRD148J-473S	47K 1/4W CARBON	
	R944	QRD148J-473S	47K 1/4W CARBON	
△	R951	QRZ0062-100	10 1/4W FUSIBLE	E
△	R952	QRZ0062-100	10 1/4W FUSIBLE	E
△	R953	QRZ0062-100	10 1/4W FUSIBLE	E
△	R954	QRZ0062-100	10 1/4W FUSIBLE	E

Others

△	ITEM	PART NUMBER	DESCRIPTION	AREA
		EM800TP-801C	SPEAKER TERMINAL	
		E11414-105	Circuit Board	
		E300107-005	C.B.HOLDER	
		E300107-006	C.B.HOLDER	
		E300209-021	HEAT SINK	
		E300209-024	HEAT SINK	B
		E300209-024	HEAT SINK	D
		E300209-024	HEAT SINK	E
		E33754-001	HEAT SINK	G
		E65508-002	TIE BAND	
		E65508-002	TAB	B
		E67764-102	WRAPPING TERMINAL	G
		E67764-102	WRAPPING TERMINAL	G
		E67764-202	WRAPPING TERMINAL	B
		E67764-302	WRAPPING TERMINAL	B
		E67764-303	WRAPPING TERMINAL	B
		E67764-303	WRAPPING TERMINAL	G
		E70859-001	EARTH PLATE	
		E70945-K25B	HEAT SINK	
		E73090-001	PLATE	B
		E73265-001	SCREW	
		SBSB3008CC	SCREW	
△	J001	QMC0637-004	AC OUTLET	B
△	J001	QMC0637-004	AC OUTLET	G
	J901	QMS6A40-021	HEADPHONE JACK	
	L751	EQL0101-1R2	INDUCTOR	
	L752	EQL0001-1R0	INDUCTOR	
	L752	EQL0001-1R0	INDUCTOR	D
	L752	EQL0001-1R0	INDUCTOR	G
	L752	EQL0101-1R2	INDUCTOR	B
	P301	EMV7112-003	CONNECTOR	
	P354	EMV7112-003	CONNECTOR	
	P405	EMV7112-004	CONNECTOR	
	P441	EMV7112-003	CONNECTOR	

△ : SAFETY PARTS

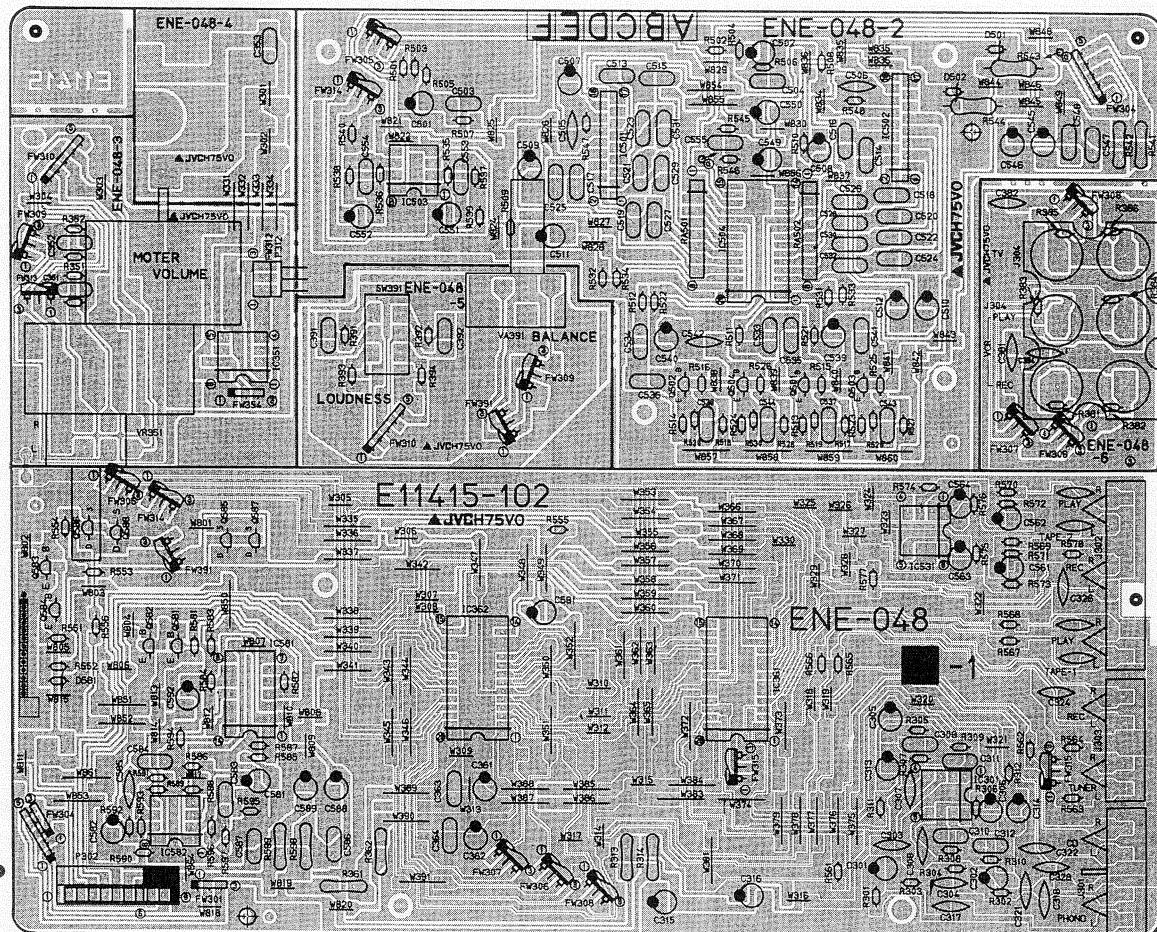
Others

ITEM	PART NUMBER	DESCRIPTION	AREA
P801	EMV7112-003	CONNECTOR	
P804	EMV7112-003	CONNECTOR	
P805	E67764-103	WRAPPING TERMINAL	
P806	E67764-103	WRAPPING TERMINAL	
P807	EMV7112-004	CONNECTOR	B
P807	EMV7112-004	CONNECTOR	G
S001	QSR0085-008U	VOLTAGE SELECTOR	B
S001	QSR0085-011	VOLTAGE SELECTOR	G
S901	QST4241-E10	PUSH SWITCH	
S902	QST4241-E10	PUSH SWITCH	
T002	ETP1000-41ZA	POWER TRANSFORMER	B
T002	ETP1000-41ZA	POWER TRANSFORMER	G
FW801	EWR33B-13KST	FLAT WIRE	
FW802	EWR34B-30SST	FLAT WIRE	
FW803	EWR36B-40SST	FLAT WIRE	
FW804	EWR33B-16KST	FLAT WIRE	
RY001	ESK1D12-113	RELAY	B
RY001	ESK1D12-113	RELAY	G
RY901	ESK5D24-218	RELAY	

▲ : SAFETY PARTS

■ ENE-048 □ Analog Switch & Pin Jack PC Board Ass'y

Note: ENE-048 □ varies according to the areas employed. See note (1) when placing an order.



Note (1)

PC Board Ass'y	Designated Areas
ENH-048 [B]	Other Countries
ENH-048 [D]	the U.K., Europe, Australia, Saudi Arabia
ENH-048 [E]	West Germany

Transistors

△	ITEM	PART NUMBER	DESCRIPTION	AREA	MAKER
	Q501	2SC1740(R,S)	SILICON	ROHM	
	Q502	2SC1740(R,S)	SILICON	ROHM	
	Q503	2SC1740(R,S)	SILICON	ROHM	
	Q504	2SC1740(R,S)	SILICON	ROHM	
	Q581	DTA114YN	SILICON	ROHM	
	Q582	DTC144EN	SILICON	ROHM	
	Q583	DTC144EN	SILICON	ROHM	
	Q584	DTA114YN	SILICON	ROHM	
	Q585	2SK105(H)	F.E.T	NEC	
	Q586	2SK105(H)	F.E.T	NEC	
	Q587	2SK105(H)	F.E.T	NEC	
	Q588	2SK105(H)	F.E.T	NEC	

I.C.s

△	ITEM	PART NUMBER	DESCRIPTION	AREA	MAKER
	IC301	NJM4560DD	I.C.	DAINICHI	
	IC351	LB1639	I.C.	SANYO	
	IC361	TC9164N	I.C.	TOSHIBA	
	IC362	TC9162N	I.C.	TOSHIBA	
	IC501	BA3812L	I.C.	ROHM	
	IC502	BA3812L	I.C.	ROHM	
	IC503	NJM4560DD	I.C.	DAINICHI	
	IC504	LC7522	I.C.	SANYO	
	IC531	M5218P	I.C.	MITSUBISHI	
	IC581	LC4966	I.C.	SANYO	
	IC582	M5218P	I.C.	MITSUBISHI	

Diodes

△	ITEM	PART NUMBER	DESCRIPTION	AREA	MAKER
	D501	MTZ6.8JC	ZENER	ROHM	
	D502	MTZ6.8JC	ZENER	ROHM	
	D581	1SS133	SILICON	ROHM	

Capacitors

△	ITEM	PART NUMBER	DESCRIPTION	AREA
	C301	QETB1HM-475	4.7MF	50V ELECTRO
	C302	QETB1HM-475	4.7MF	50V ELECTRO
	C303	QCS21HJ-101	100PF	50V CERAMIC
	C303	QCS21HJ-101	100PF	50V CERAMIC
	C303	QCS21HJ-331	330PF	50V CERAMIC
	C304	QCS21HJ-101	100PF	50V CERAMIC
	C304	QCS21HJ-101	100PF	50V CERAMIC
	C304	QCS21HJ-331	330PF	50V CERAMIC
	C305	QETB1AM-476	4.7MF	10V ELECTRO
	C306	QETB1AM-476	4.7MF	10V ELECTRO
	C307	QCS21HJ-101	100PF	50V CERAMIC
	C308	QCS21HJ-101	100PF	50V CERAMIC
	C309	QFN81HJ-182	1800PF	50V MYLAR
	C310	QFN81HJ-182	1800PF	50V MYLAR
	C311	QFN81HJ-682	6800PF	50V MYLAR
	C312	QFN81HJ-682	6800PF	50V MYLAR
	C313	QETB1HM-475	4.7MF	50V ELECTRO
	C314	QETB1HM-475	4.7MF	50V ELECTRO
	C315	QETB1EM-226	22MF	25V ELECTRO
	C316	QETB1EM-226	22MF	25V ELECTRO

Capacitors

△	ITEM	PART NUMBER	DESCRIPTION	AREA
	C317	QCS21HJ-101	100PF	50V CERAMIC
	C317	QCS21HJ-101	100PF	50V CERAMIC
	C318	QCS21HJ-101A	100PF	50V CERAMIC
	C318	QFN81HJ-223	0.022MF	50V MYLAR
	C321	QFN81HJ-223	0.022MF	50V MYLAR
	C322	QFN81HJ-223	0.022MF	50V MYLAR
	C324	QFN81HJ-223	0.022MF	50V MYLAR
	C326	QFN81HJ-223	0.022MF	50V MYLAR
	C328	QFV81HJ-473	0.047MF	50V T.FILM
	C331	QCS21HJ-331	330PF	50V CERAMIC
	C332	QCS21HJ-331	330PF	50V CERAMIC
	C333	QCS21HJ-331	330PF	50V CERAMIC
	C334	QCS21HJ-331	330PF	50V CERAMIC
	C335	QCS21HJ-331	330PF	50V CERAMIC
	C336	QCS21HJ-331	330PF	50V CERAMIC
	C337	QCS21HJ-331	330PF	50V CERAMIC
	C338	QCS21HJ-331	330PF	50V CERAMIC
	C339	QCS21HJ-331	330PF	50V CERAMIC
	C340	QCS21HJ-331	330PF	50V CERAMIC
	C341	QCS21HJ-331	330PF	50V CERAMIC
	C342	QCS21HJ-331	330PF	50V CERAMIC
	C351	QCS21HJ-181	180PF	50V CERAMIC
	C352	QCS21HJ-181	180PF	50V CERAMIC
	C353	QF81HJ-473	0.047MF	50V MYLAR
	C361	QETB1EM-476	4.7MF	25V ELECTRO
	C362	QETB1EM-476	4.7MF	25V ELECTRO
	C363	QFN81HJ-223	0.022MF	50V MYLAR
	C364	QFN81HJ-223	0.022MF	50V MYLAR
	C381	QCF21HP-223	0.022MF	50V CERAMIC
	C382	QCF21HP-223	0.022MF	50V CERAMIC
	C384	QFN81HJ-473	0.047MF	50V MYLAR
	C391	QFN81HJ-123	0.012MF	50V MYLAR
	C392	QFN81HJ-123	0.012MF	50V MYLAR
	C501	QETB1HM-475	4.7MF	50V ELECTRO
	C502	QETB1HM-475	4.7MF	50V ELECTRO
	C503	QCS21HJ-470	47PF	50V CERAMIC
	C504	QCS21HJ-470	47PF	50V CERAMIC
	C505	QCS21HJ-101	100PF	50V CERAMIC
	C506	QCS21HJ-101	100PF	50V CERAMIC
	C507	QETB1HM-475	4.7MF	50V ELECTRO
	C508	QETB1HM-475	4.7MF	50V ELECTRO
	C509	QETB1HM-475	4.7MF	50V ELECTRO
	C510	QETB1HM-475	4.7MF	50V ELECTRO
	C511	QETB1HM-475	4.7MF	50V ELECTRO
	C512	QETB1HM-475	4.7MF	50V ELECTRO
	C513	QFN81HJ-153	0.015MF	50V MYLAR
	C514	QFN81HJ-153	0.015MF	50V MYLAR
	C515	QFN81HJ-104	0.1MF	50V MYLAR
	C516	QFN81HJ-104	0.1MF	50V MYLAR
	C517	QCS21HJ-331	330PF	50V CERAMIC
	C518	QFN81HJ-562	5600PF	50V MYLAR
	C519	QFN81HJ-102	1000PF	50V MYLAR
	C520	QFN81HJ-272	2700PF	50V MYLAR
	C521	QFN81HJ-272	2700PF	50V MYLAR
	C522	QFN81HJ-102	1000PF	50V MYLAR
	C523	QFN81HJ-562	5600PF	50V MYLAR
	C524	QCS21HJ-331	330PF	50V CERAMIC
	C525	QFN81HJ-222	2200PF	50V MYLAR
	C526	QFN81HJ-333	0.033MF	50V MYLAR
	C527	QFN81HJ-562	5600PF	50V MYLAR
	C528	QFN81HJ-123	0.012MF	50V MYLAR
	C529	QFN81HJ-123	0.012MF	50V MYLAR
	C530	QFN81HJ-562	5600PF	50V MYLAR
	C531	QFN81HJ-333	0.033MF	50V MYLAR
	C532	QFN81HJ-222	2200PF	50V MYLAR
	C533	QFN81HJ-684	0.68MF	50V T.FILM
	C534	QFN81HJ-684	0.68MF	50V T.FILM
	C535	QFN81HJ-683	0.068MF	50V MYLAR
	C536	QFN81HJ-683	0.068MF	50V MYLAR
	C537	QFN81HJ-562	5600PF	50V MYLAR
	C538	QFN81HJ-562	5600PF	50V MYLAR
	C539	QEK61HM-224G	0.22MF	50V ELECTRO
	C540	QEK61HM-224G	0.22MF	50V ELECTRO
	C541	QFN81HJ-473	0.047MF	50V MYLAR
	C542	QFN81HJ-473	0.047MF	50V MYLAR
	C543	QFN81HJ-472	4700PF	50V MYLAR
	C544	QFN81HJ-472	4700PF	50V MYLAR
	C545	QETB1HM-475	4.7MF	50V ELECTRO
	C546	QETB1HM-475	4.7MF	50V ELECTRO
	C547	QFN81HJ-223	0.022MF	50V MYLAR
	C548	QFN81HJ-223	0.022MF	50V MYLAR
	C549	QETB1HM-475	4.7MF	50V ELECTRO
	C550	QETB1HM-475	4.7MF	50V ELECTRO
	C551	QETB1HM-475	4.7MF	50V ELECTRO
	C552	QETB1HM-475	4.7MF	50V ELECTRO
	C553	QCS21HJ-470	47PF	50V CERAMIC
	C554	QCS21HJ-470	47PF	50V CERAMIC
	C555	QFN81HJ-223	0.022MF	50V MYLAR
	C561	QETB1EM-106	10MF	25V ELECTRO
	C562	QETB1EM-106	10MF	25V ELECTRO

△ : SAFETY PARTS

Capacitors

△	ITEM	PART NUMBER	DESCRIPTION			AREA
	C563	QETB1EM-106	10MF	25V	ELECTRO	
	C564	QETB1EM-106	10MF	25V	ELECTRO	
	C581	QETB1HM-475	4.7MF	50V	ELECTRO	
	C582	QETB1HM-475	4.7MF	50V	ELECTRO	
	C584	QFN81HJ-472	4700PF	50V	MYLAR	
	C585	QCS21HJ-271	270PF	50V	CERAMIC	
	C586	QFN81HJ-223	0.022MF	50V	MYLAR	
	C587	QFN81HJ-223	0.022MF	50V	MYLAR	
	C588	QETB1EM-106	10MF	25V	ELECTRO	
	C589	QETB1EM-106	10MF	25V	ELECTRO	
	C591	EEZ1601-226	22MF	16V	ELECTRO	
	C592	EEZ1601-226	22MF	16V	ELECTRO	

△ : SAFETY PARTS

Resistors

△	ITEM	PART NUMBER	DESCRIPTION			AREA
	R301	QRD167J-222	2.2K	1/6W	CARBON	
	R302	QRD167J-222	2.2K	1/6W	CARBON	
	R303	QRD167J-473	47K	1/6W	CARBON	
	R304	QRD167J-473	47K	1/6W	CARBON	
	R305	QRD167J-561	560	1/6W	CARBON	
	R306	QRD167J-561	560	1/6W	CARBON	
	R307	QRD167J-393	39K	1/6W	CARBON	
	R308	QRD167J-393	39K	1/6W	CARBON	
	R309	QRD167J-474	470K	1/6W	CARBON	
	R310	QRD167J-474	470K	1/6W	CARBON	
	R311	QRD167J-104	100K	1/6W	CARBON	
	R312	QRD167J-104	100K	1/6W	CARBON	
△	R313	QRD14CJ-680S	68	1/4W	UNF.CARBON	
△	R314	QRD14CJ-680S	68	1/4W	UNF.CARBON	
△	R315	QRD167J-152	1.5K	1/6W	CARBON	E
	R316	QRD167J-152	1.5K	1/6W	CARBON	E
	R351	QRD167J-105	1M	1/6W	CARBON	
	R352	QRD167J-105	1M	1/6W	CARBON	
△	R361	QRD14CJ-680S	68	1/4W	UNF.CARBON	
△	R362	QRD14CJ-680S	68	1/4W	UNF.CARBON	
△	R381	QRD167J-221	220	1/6W	CARBON	
	R382	QRD167J-221	220	1/6W	CARBON	
	R383	QRD167J-221	220	1/6W	CARBON	
	R384	QRD167J-221	220	1/6W	CARBON	
	R385	QRD167J-221	220	1/6W	CARBON	
	R386	QRD167J-221	220	1/6W	CARBON	
	R391	QRD167J-683	68K	1/6W	CARBON	
	R392	QRD167J-683	68K	1/6W	CARBON	
	R393	QRD167J-365	36K	1/6W	CARBON	
	R394	QRD167J-365	36K	1/6W	CARBON	
	R501	QRD167J-104	100K	1/6W	CARBON	
	R502	QRD167J-104	100K	1/6W	CARBON	
	R503	QRD167J-224	220K	1/6W	CARBON	
	R504	QRD167J-224	220K	1/6W	CARBON	
	R505	QRD167J-224	220K	1/6W	CARBON	
	R506	QRD167J-224	220K	1/6W	CARBON	
	R507	QRD167J-101	100	1/6W	CARBON	
	R508	QRD167J-101	100	1/6W	CARBON	
	R509	QRD167J-113	11K	1/6W	CARBON	
	R510	QRD167J-113	11K	1/6W	CARBON	
	R511	QRD167J-181	180	1/6W	CARBON	
	R512	QRD167J-181	180	1/6W	CARBON	
	R513	QRD167J-821	820	1/6W	CARBON	
	R514	QRD167J-821	820	1/6W	CARBON	
	R515	QRD167J-223	22K	1/6W	CARBON	
	R516	QRD167J-223	22K	1/6W	CARBON	
	R517	QRD167J-154	150K	1/6W	CARBON	
	R518	QRD167J-154	150K	1/6W	CARBON	
	R519	QRD167J-103	10K	1/6W	CARBON	
	R520	QRD167J-103	10K	1/6W	CARBON	
	R521	QRD167J-221	220	1/6W	CARBON	
	R522	QRD167J-221	220	1/6W	CARBON	
	R523	QRD167J-821	820	1/6W	CARBON	
	R524	QRD167J-821	820	1/6W	CARBON	
	R525	QRD167J-153	15K	1/6W	CARBON	
	R526	QRD167J-153	15K	1/6W	CARBON	
	R527	QRD167J-104	100K	1/6W	CARBON	
	R528	QRD167J-104	100K	1/6W	CARBON	
	R529	QRD167J-103	10K	1/6W	CARBON	
	R530	QRD167J-103	10K	1/6W	CARBON	
	R531	QRD167J-224	220K	1/6W	CARBON	
	R532	QRD167J-224	220K	1/6W	CARBON	
	R533	QRD167J-224	220K	1/6W	CARBON	
	R534	QRD167J-224	220K	1/6W	CARBON	
	R535	QRD167J-822	8.2K	1/6W	CARBON	
	R536	QRD167J-822	8.2K	1/6W	CARBON	
	R537	QRD167J-822	8.2K	1/6W	CARBON	
	R538	QRD167J-822	8.2K	1/6W	CARBON	
	R539	QRD167J-224	220K	1/6W	CARBON	
	R540	QRD167J-224	220K	1/6W	CARBON	
△	R541	QRD14CJ-680S	68	1/4W	UNF.CARBON	
△	R542	QRD14CJ-680S	68	1/4W	UNF.CARBON	

Resistors

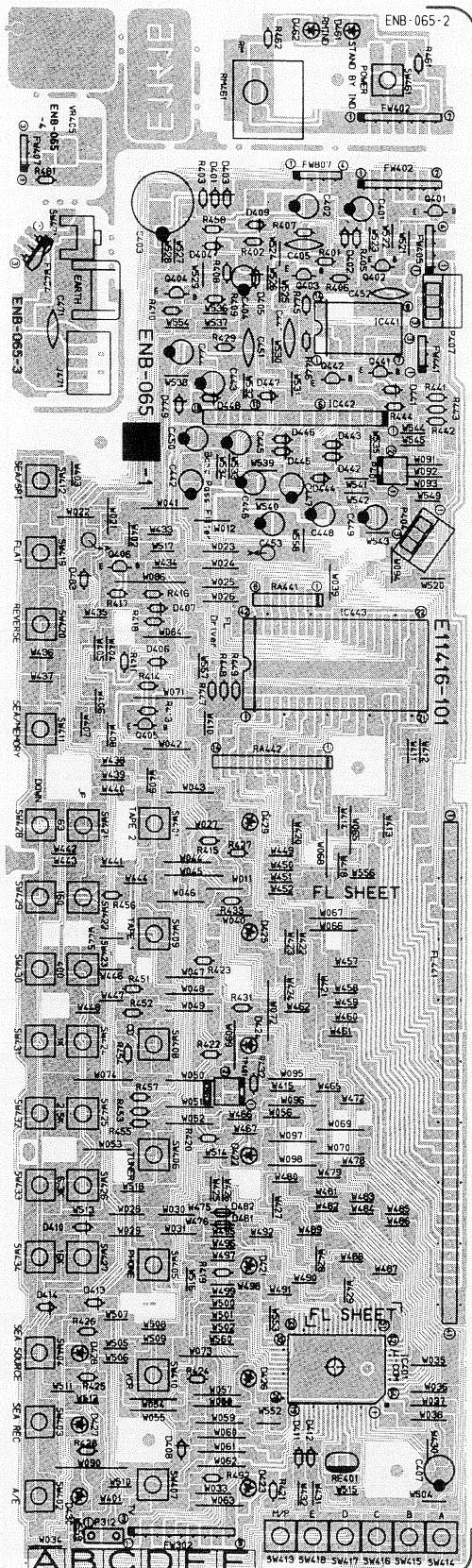
△	ITEM	PART NUMBER	DESCRIPTION			AREA
△	R543	QRD125J-271	270	1/2W	UNF.CARBON	
△	R544	QRD125J-271	270	1/2W	UNF.CARBON	
	R545	QRD167J-681	680	1/6W	CARBON	
	R546	QRD167J-272	2.7K	1/6W	CARBON	
	R547	QRD167J-113	11K	1/6W	CARBON	
	R548	QRD167J-113	11K	1/6W	CARBON	
	R551	QRD167J-103	10K	1/6W	CARBON	
	R552	QRD167J-823	82K	1/6W	CARBON	
	R553	QRD167J-103	10K	1/6W	CARBON	
	R554	QRD167J-103	10K	1/6W	CARBON	
	R555	QRD167J-332	3.3K	1/6W	CARBON	
	R556	QRD167J-332	3.3K	1/6W	CARBON	
	R561	QRD167J-221	220	1/6W	CARBON	
	R562	QRD167J-221	220	1/6W	CARBON	
	R563	QRD167J-221	220	1/6W	CARBON	
	R564	QRD167J-221	220	1/6W	CARBON	
	R565	QRD167J-221	220	1/6W	CARBON	
	R566	QRD167J-221	220	1/6W	CARBON	
	R567	QRD167J-221	220	1/6W	CARBON	
	R568	QRD167J-221	220	1/6W	CARBON	
	R569	QRD167J-102	1K	1/6W	CARBON	
	R570	QRD167J-102	1K	1/6W	CARBON	
	R571	QRD167J-823	82K	1/6W	CARBON	
	R572	QRD167J-823	82K	1/6W	CARBON	
	R573	QRD167J-124	120K	1/6W	CARBON	
	R574	QRD167J-124	120K	1/6W	CARBON	
	R575	QRD167J-474	470K	1/6W	CARBON	
	R576	QRD167J-474	470K	1/6W	CARBON	
	R577	QRD167J-221	220	1/6W	CARBON	
	R578	QRD167J-221	220	1/6W	CARBON	
	R581	QRD167J-563	56K	1/6W	CARBON	
	R582	QRD167J-563	56K	1/6W	CARBON	
	R583	QRD167J-563	56K	1/6W	CARBON	
	R584	QRD167J-563	56K	1/6W	CARBON	
	R585	QRD167J-223	22K	1/6W	CARBON	
	R586	QRD167J-273	27K	1/6W	CARBON	
	R587	QRD167J-474	470K	1/6W	CARBON	
	R588	QRD167J-474	470K	1/6W	CARBON	
	R589	QRD167J-223	22K	1/6W	CARBON	
	R590	QRD167J-474	470K	1/6W	CARBON	
	R591	QRD167J-104	100K	1/6W	CARBON	
	R592	QRD167J-154	150K	1/6W	CARBON	
	R593	QRD167J-394	390K	1/6W	CARBON	
	R594	QRD167J-474	470K	1/6W	CARBON	
	R595	QRD167J-333	33K	1/6W	CARBON	
	R596	QRD167J-562	5.6K	1/6W	CARBON	
	R597	QRD167J-273	27K	1/6W	CARBON	
△	R598	QRD14CJ-680S	68	1/4W	UNF.CARBON	
△	R599	QRD14CJ-680S	68	1/4W	UNF.CARBON	
	RA501	QRB075J-474	470K	1/8W	R.NETWORK	
	RA502	QRB075J-474	470K	1/8W	R.NETWORK	
	VR351	QVDB91B-EF5B	250K	VARIABLE		
	E11415-103				Circuit Board	
	E73837-001				BRACKET	
	FE-ZMS409				SHIELD RING	
	SBSTS006Z				SCREW	
	J301	EMNO0TV-405A			4P PIN JACK	
	J302	EMNO0TV-602A			6P PIN JACK	
	J303	EMNO0TV-402A			4P PIN JACK	
	J304	EMNO0TP-602A			6P PIN JACK	
	L301	EQL4004-220			INDUCTOR	E
	L302	EQL4004-220			INDUCTOR	E
	P302	EMV7112-009			CONNECTOR	
	P312	QMV5004-003K			PLUG ASSY	
	FW301	EWR33B-16KST			FLAT WIRE	
	FW304	EWR35B-35SS			FLAT WIRE	
	FW305	EWR23C-30NN			FLAT WIRE	
	FW306	EWR23C-25NN			FLAT WIRE	
	FW307	EWR23C-25NN			FLAT WIRE	
	FW308	EWR23C-30NN			FLAT WIRE	
	FW309	EWR23C-20NN			FLAT WIRE	
	FW310	EWR35B-20SS			FLAT WIRE	
	FW313	EWR23C-20JN			FLAT WIRE	
	FW314	EWR23C-25NN			FLAT WIRE	
	FW315	EWR23C-13NN			FLAT WIRE	
	FW354	EWR35B-16KST			FLAT WIRE	
	FW391	EWR23C-16NN			FLAT WIRE	
	SW391	QSTA4102-E08			PUSH SWITCH	
	VA391	QVDA98W-EF5C			V.RESISTOR	

△ : SAFETY PARTS

■ ENB-065 □ Logic & Tact Switch PC Board Ass'y

Note: ENB-065 □ varies according to the areas employed. See note (1) when placing an order.

Note (1)



PC Board Ass'y	Designated Areas
ENH-065 □	Other Countries
ENH-065 □	the U.K., Europe, Australia, Saudi Arabia
ENH-065 □	West Germany

Transistors

△	ITEM	PART NUMBER	DESCRIPTION	AREA
			MAKER	
	Q401	DTA114EN	SILICON	ROHM
	Q402	DTC144EN	SILICON	ROHM
	Q403	2SC458(C,D)	SILICON	HITACHI
	Q404	2SC458(C,D)	SILICON	HITACHI
	Q405	2SC458(C,D)	SILICON	HITACHI
	Q406	2SC458(C,D)	SILICON	HITACHI
	Q441	DTA144EN	SILICON	HITACHI
	Q442	DTC114YN	SILICON	ROHM

I.C.s

△	ITEM	PART NUMBER	DESCRIPTION	AREA
			MAKER	
	IC401	UPD75104G554-1B	I.C.	NEC
	IC441	TC4013BP	I.C.	TOSHIBA
	IC442	7EL-SPI-001	I.C.	KYOSERA
	IC443	LC7565	I.C.	SANYO

Diodes

△	ITEM	PART NUMBER	DESCRIPTION	AREA
			MAKER	
	D401	1SS133	SILICON	ROHM
	D402	1SS133	SILICON	ROHM
	D403	1SS133	SILICON	ROHM
	D404	MTZ5.6JC	ZENER	ROHM
	D405	1SS133	SILICON	ROHM
	D406	1SS133	SILICON	ROHM
	D407	1SS133	SILICON	ROHM
	D408	1SS133	SILICON	ROHM
	D409	1SS133	SILICON	ROHM
	D410	1SS133	SILICON	ROHM
	D411	1SS133	SILICON	ROHM
	D412	1SS133	SILICON	ROHM
	D413	1SS133	SILICON	ROHM
	D414	1SS133	SILICON	ROHM
	D421	SLR-34DC3F	L.E.D.	ROHM
	D422	SLR-34DC3F	L.E.D.	ROHM
	D423	SLR-34DC3F	L.E.D.	ROHM
	D424	SLR-34DC3F	L.E.D.	ROHM
	D425	SLR-34DC3F	L.E.D.	ROHM
	D426	SLR-34DC3F	L.E.D.	ROHM
	D427	SLR-34DC3F	L.E.D.	ROHM
	D428	SLR-34DC3F	L.E.D.	ROHM
	D429	SLR-34VC3F	L.E.D.	ROHM
	D430	SLR-34DC3F	L.E.D.	ROHM
	D441	1SS133	SILICON	ROHM
	D442	1SS133	SILICON	ROHM
	D443	1SS133	SILICON	ROHM
	D444	1SS133	SILICON	ROHM
	D445	1SS133	SILICON	ROHM
	D446	1SS133	SILICON	ROHM
	D447	1SS133	SILICON	ROHM
	D448	1SS133	SILICON	ROHM
	D449	1SS133	SILICON	ROHM
	D461	SLR-34VC3F	L.E.D.	ROHM
	D462	SLR-34VC3F	L.E.D.	ROHM

△ : SAFETY PARTS

Capacitors

▲	ITEM	PART NUMBER	DESCRIPTION			AREA
C401	QETB1HM-106	10MF	50V	ELECTRO		
C402	QETB1HM-225	2.2MF	50V	ELECTRO		
C403	EEZ0502-479	47000MF	5.5V	ELECTRO		
C404	QETB1HM-225	2.2MF	50V	ELECTRO		
C405	QETB1HM-106	10MF	50V	ELECTRO		
C407	QEKG1CM-107	100MF	16V	ELECTRO		
C441	QCS21HJ-101	100PF	50V	CERAMIC		
C442	QETB1HM-474	0.47MF	50V	ELECTRO		
C443	QETB1HM-474	0.47MF	50V	ELECTRO		
C444	QETB1HM-474	0.47MF	50V	ELECTRO		
C445	QETB1HM-474	0.47MF	50V	ELECTRO		
C446	QETB1HM-474	0.47MF	50V	ELECTRO		
C447	QETB1HM-474	0.47MF	50V	ELECTRO		
C448	QETB1HM-474	0.47MF	50V	ELECTRO		
C449	QETB1HM-474	0.47MF	50V	ELECTRO		
C450	QETB1EM-107	100MF	25V	ELECTRO		
C451	QCF21HP-473	0.047MF	50V	CERAMIC		
C452	QCF21HP-223	0.022MF	50V	CERAMIC		
C453	QETBOJM-227	220MF	6.3V	ELECTRO		
C471	QCF21HP-223	0.022MF	50V	CERAMIC		

Resistors

▲	ITEM	PART NUMBER	DESCRIPTION			AREA
R401	QRD167J-102	1K	1/6W	CARBON		
R402	QRD167J-222	2.2K	1/6W	CARBON		
R403	QRD167J-331	330	1/6W	CARBON		
R405	QRD167J-472	4.7K	1/6W	CARBON		
R406	QRD167J-103	10K	1/6W	CARBON		
R407	QRD167J-223	22K	1/6W	CARBON		
R408	QRD167J-473	47K	1/6W	CARBON		
R409	QRD167J-223	22K	1/6W	CARBON		
R410	QRD167J-472	4.7K	1/6W	CARBON		
R411	QRD167J-183	18K	1/6W	CARBON		
R413	QRD167J-103	10K	1/6W	CARBON		
R414	QRD167J-471	470	1/6W	CARBON		
R416	QRD167J-473	47K	1/6W	CARBON		
R417	QRD167J-223	22K	1/6W	CARBON		
R418	QRD167J-103	10K	1/6W	CARBON		
R419	QRD167J-271	270	1/6W	CARBON		
R420	QRD167J-271	270	1/6W	CARBON		
R421	QRD167J-271	270	1/6W	CARBON		
R422	QRD167J-271	270	1/6W	CARBON		
R423	QRD167J-271	270	1/6W	CARBON		
R424	QRD167J-271	270	1/6W	CARBON		
R425	QRD167J-271	270	1/6W	CARBON		
R426	QRD167J-271	270	1/6W	CARBON		
R427	QRD167J-271	270	1/6W	CARBON		
R428	QRD167J-271	270	1/6W	CARBON		
R429	QRD167J-271	270	1/6W	CARBON		
R431	QRD167J-104	100K	1/6W	CARBON		
R432	QRD167J-104	100K	1/6W	CARBON		
R433	QRD167J-104	100K	1/6W	CARBON		
R441	QRD167J-104	100K	1/6W	CARBON		
R442	QRD167J-473	47K	1/6W	CARBON		
R443	QRD167J-104	100K	1/6W	CARBON		
R444	QRD167J-473	47K	1/6W	CARBON		
R445	QRD167J-473	47K	1/6W	CARBON		
R446	QRD167J-103	10K	1/6W	CARBON		
R447	QRD167J-474	470K	1/6W	CARBON		
R448	QRD167J-474	470K	1/6W	CARBON		
R449	QRD167J-183	18K	1/6W	CARBON		
R451	QRD167J-104	100K	1/6W	CARBON		
R452	QRD167J-104	100K	1/6W	CARBON		
R453	QRD167J-104	100K	1/6W	CARBON		
R454	QRD167J-104	100K	1/6W	CARBON		
R455	QRD167J-104	100K	1/6W	CARBON		
R456	QRD167J-104	100K	1/6W	CARBON		
R457	QRD167J-104	100K	1/6W	CARBON		
R458	QRD167J-223	22K	1/6W	CARBON		
R461	QRD167J-331	330	1/6W	CARBON		
R462	QRD167J-271	270	1/6W	CARBON		
R481	QRD167J-101	100	1/6W	CARBON		
R483	QRD167J-103	10K	1/6W	CARBON		
R484	QRD167J-103	10K	1/6W	CARBON		
RA441	QRB079J-104	100K	1/10W	R.NETWORK		
RA442	QRB139J-104	100K	1/10W	R.NETWORK		
RM461	GP1U501V			SENSOR		
VR405	QVDA988-EF5C	250K		VARIABLE		

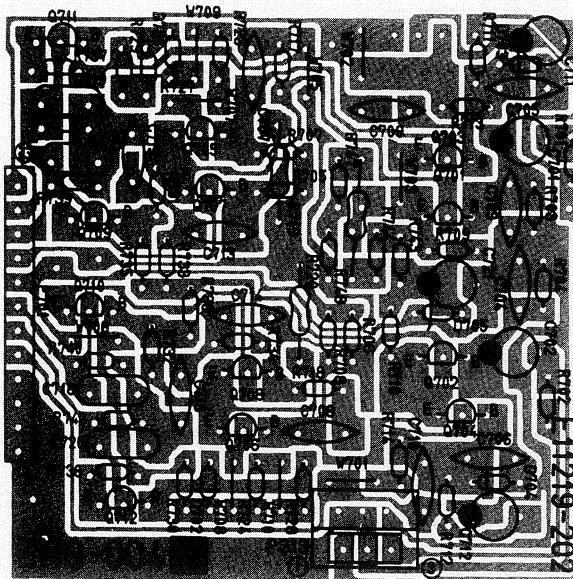
Others

▲	ITEM	PART NUMBER	DESCRIPTION			AREA
		E11416-101(S)	Circuit Board			
		E3400-381	FELT SPACER			
		E70225-001	EARTH PLATE			
J471		QMS3533-001	MINI JACK			
P312		EW5013-245	SOCKET_WIRE			
P401		EM5103-002A	PLUG ASSY			
P404		EMV7112-003	CONNECTOR			
P407		EMV7112-003	CONNECTOR			
FL441		ELU0001-036	FL TUBE			
FW302		EWR39B-25KST	FLAT WIRE			
FW402		EWR37B-08SST	FLAT WIRE			
FW404		EWR23C-70JN	FLAT WIRE			
FW405		EWR34B-25KST	FLAT WIRE			
FW407		EWR33B-20KST.	FLAT WIRE			
FW441		EWR33B-30KST.	FLAT WIRE			
FW807		EWR34B-20KST	FLAT WIRE			
RE401		ECX0004-194KM	RESONATOR			
SW401		ESP0001-007	TACT SWITCH			
SW402		ESP0001-007	TACT SWITCH			
SW403		ESP0001-007	TACT SWITCH			
SW404		ESP0001-007	TACT SWITCH			
SW405		ESP0001-007	TACT SWITCH			
SW406		ESP0001-007	TACT SWITCH			
SW407		ESP0001-007	TACT SWITCH			
SW408		ESP0001-007	TACT SWITCH			
SW409		ESP0001-007	TACT SWITCH			
SW410		ESP0001-007	TACT SWITCH			
SW411		ESP0001-007	TACT SWITCH			
SW412		ESP0001-007	TACT SWITCH			
SW413		ESP0001-007	TACT SWITCH			
SW414		ESP0001-007	TACT SWITCH			
SW415		ESP0001-007	TACT SWITCH			
SW416		ESP0001-007	TACT SWITCH			
SW417		ESP0001-007	TACT SWITCH			
SW418		ESP0001-007	TACT SWITCH			
SW419		ESP0001-007	TACT SWITCH			
SW420		ESP0001-007	TACT SWITCH			
SW421		ESP0001-007	TACT SWITCH			
SW422		ESP0001-007	TACT SWITCH			
SW423		ESP0001-007	TACT SWITCH			
SW424		ESP0001-007	TACT SWITCH			
SW425		ESP0001-007	TACT SWITCH			
SW426		ESP0001-007	TACT SWITCH			
SW427		ESP0001-007	TACT SWITCH			
SW428		ESP0001-007	TACT SWITCH			
SW429		ESP0001-007	TACT SWITCH			
SW430		ESP0001-007	TACT SWITCH			
SW431		ESP0001-007	TACT SWITCH			
SW432		ESP0001-007	TACT SWITCH			
SW433		ESP0001-007	TACT SWITCH			
SW434		ESP0001-007	TACT SWITCH			
SW461		ESP0001-007	TACT SWITCH			
SW471		ESP0001-010	TACT SWITCH			
TP401		QMV5005-002K	PLUG ASSY			

▲ : SAFETY PARTS

■ ENG-004 □ Pre-Drive PC Board Ass'y

Note: ENG-004 □ varies according to the areas employed. See note (1) when placing an order.



Note (1)

PC Board Ass'y	Designated Areas
ENG-004 L	Other Countries
ENG-004 T	the U.K., Europe, Australia, Saudi Arabia
ENG-004 U	West Germany

Transistors

△	ITEM	PART NUMBER	DESCRIPTION	AREA	MAKER
	Q701	ZSC2240(A,B)	SILICON		TOSHIBA
	Q702	ZSC2240(A,B)	SILICON		TOSHIBA
	Q703	ZSC2240(A,B)	SILICON		TOSHIBA
	Q704	ZSC2240(A,B)	SILICON		TOSHIBA
	Q705	2SA1038(S,E)	SILICON		ROHM
	Q706	2SA1038(S,E)	SILICON		ROHM
	Q707	2SA933LN(R,S)	SILICON		ROHM
	Q708	2SA933LN(R,S)	SILICON		ROHM
	Q709	2SA1038(S,E)	SILICON		ROHM
	Q710	2SA1038(S,E)	SILICON		ROHM
	Q711	ZSC2389(S,E)	SILICON		ROHM
	Q712	ZSC2389(S,E)	SILICON		ROHM

Diodes

△	ITEM	PART NUMBER	DESCRIPTION	AREA	MAKER
	D701	1SS133	SILICON		ROHM
	D702	1SS133	SILICON		ROHM
	D703	1SS133	SILICON		ROHM
	D704	1SS133	SILICON		ROHM
	D704	1SS133	SILICON		ROHM
	D705	MT222JC	ZENER		ROHM

Capacitors

△	ITEM	PART NUMBER	DESCRIPTION	AREA
	C701	EEZ1601-226	22MF	16V ELECTRO
	C701	EEZ5003-106Z	10MF	ELECTRO
	C701	EEZ5003-106Z	10MF	ELECTRO
	C702	EEZ1601-226	22MF	16V ELECTRO
	C702	EEZ5003-106Z	10MF	ELECTRO
	C702	EEZ5003-106Z	10MF	ELECTRO
	C703	GCS21HJ-271	270PF	50V CERAMIC
	C704	GCS21HJ-271	270PF	50V CERAMIC
	C705	GCS21HJ-101	100PF	50V CERAMIC
	C706	GCS21HJ-101	100PF	50V CERAMIC
	C707	GCY21HK-332	3300PF	50V CERAMIC
	C708	GCY21HK-332	3300PF	50V CERAMIC
	C709	GCS21HJ-7R0	7PF	50V CERAMIC
	C710	GCS21HJ-7R0	7PF	50V CERAMIC
	C711	GEHC1CM-476	47MF	16V ELECTRO
	C711	GETB1CM-476	47MF	16V ELECTRO
	C712	GEHC1CM-476	47MF	16V ELECTRO
	C712	GETB1CM-476	47MF	16V ELECTRO
	C713	GCS21HJ-220	22PF	50V CERAMIC
	C714	GCS21HJ-220	22PF	50V CERAMIC
	C715	GCS21HJ-121	120PF	50V CERAMIC
	C716	GCS21HJ-121	120PF	50V CERAMIC
	C717	QFN81HJ-822	8200PF	50V MYLAR
	C718	QFN81HJ-822	8200PF	50V MYLAR
	C719	QFN81HJ-822	8200PF	50V MYLAR
	C720	QFN81HJ-822	8200PF	50V MYLAR
	C721	GEHC1EM-106	10MF	25V ELECTRO
	C721	GETB1EM-106	10MF	25V ELECTRO
	C721	QETB1EM-106	10MF	25V ELECTRO

Resistors

△	ITEM	PART NUMBER	DESCRIPTION	AREA
	R701	QRD167J-222	2.2K	1/6W CARBON
	R702	QRD167J-222	2.2K	1/6W CARBON
	R703	QRD167J-104	100K	1/6W CARBON
	R704	QRD167J-104	100K	1/6W CARBON
	R705	QRD167J-202	2K	1/6W CARBON
	R706	QRD167J-202	2K	1/6W CARBON
	R707	QRD167J-202	2K	1/6W CARBON
	R708	QRD167J-202	2K	1/6W CARBON
	R709	QRD167J-103	10K	1/6W CARBON
	R710	QRD167J-103	10K	1/6W CARBON
	R711	QRD167J-561	560	1/6W CARBON
	R711	QRD167J-681	680	1/6W CARBON
	R711	QRD167J-681	680	1/6W CARBON
	R712	QRD167J-561	560	1/6W CARBON
	R712	QRD167J-681	680	1/6W CARBON
	R713	QRD167J-104	100K	1/6W CARBON
	R714	QRD167J-104	100K	1/6W CARBON
	R717	QRD167J-101	100	1/6W CARBON
	R718	QRD167J-101	100	1/6W CARBON
△	R719	QRD145J-121S	120	1/4W UNF. CARBON
△	R719	QRD145J-121S	120	1/4W UNF. CARBON
△	R719	QRD145J-201S	200	1/4W UNF. CARBON
△	R720	QRD145J-121S	120	1/4W UNF. CARBON
△	R720	QRD145J-121S	120	1/4W UNF. CARBON
△	R720	QRD145J-201S	200	1/4W UNF. CARBON
	R723	QRD144J-472S	4.7K	1/4W CARBON
	R723	QRD144J-472S	4.7K	1/4W CARBON
	R723	QRD144J-822S	8.2K	1/4W CARBON
	R724	QRD144J-472S	4.7K	1/4W CARBON
	R724	QRD144J-472S	4.7K	1/4W CARBON
	R724	QRD144J-472S	4.7K	1/4W CARBON
	R724	QRD144J-472S	4.7K	1/4W CARBON
	R724	QRD144J-822S	8.2K	1/4W CARBON
	R727	QRD144J-472S	4.7K	1/4W CARBON
	R727	QRD144J-472S	4.7K	1/4W CARBON
	R727	QRD144J-822S	8.2K	1/4W CARBON
	R728	QRD144J-472S	4.7K	1/4W CARBON
	R728	QRD144J-472S	4.7K	1/4W CARBON
	R728	QRD144J-822S	8.2K	1/4W CARBON
	R729	QRD167J-391	390	1/6W CARBON
	R729	QRD167J-681	680	1/6W CARBON
	R730	QRD167J-391	390	1/6W CARBON
	R730	QRD167J-681	680	1/6W CARBON
	R730	QRD167J-152	1.5K	1/6W CARBON

△ : SAFETY PARTS

Resistors

△	ITEM	PART NUMBER	DESCRIPTION	AREA
	R732	QRD167J-152	1.5K	1/6W CARBON
	R733	QRD167J-152	1.5K	1/6W CARBON
	R734	QRD167J-152	1.5K	1/6W CARBON
	R735	QRD167J-333	33K	1/6W CARBON
	R736	QRD167J-333	33K	1/6W CARBON
	R737	QRD167J-391	390	1/6W CARBON
	R737	QRD167J-391	390	1/6W CARBON
	R737	QRD167J-391	390	1/6W CARBON
	R738	QRD167J-391	390	1/6W CARBON
	R738	QRD167J-391	390	1/6W CARBON
	R738	QRD167J-681	680	1/6W CARBON
	R739	QRD167J-123	12K	1/6W CARBON
	R739	QRD167J-682	6.8K	1/6W CARBON
	R739	QRD167J-682	6.8K	1/6W CARBON
	R740	QRD167J-123	12K	1/6W CARBON
	R740	QRD167J-682	6.8K	1/6W CARBON
	R740	QRD167J-682	6.8K	1/6W CARBON
	R741	QRD167J-123	12K	1/6W CARBON
	R741	QRD167J-682	6.8K	1/6W CARBON
	R741	QRD167J-682	6.8K	1/6W CARBON

Resistors

△	ITEM	PART NUMBER	DESCRIPTION	AREA
	R742	QRD167J-123	12K	1/6W CARBON
	R742	QRD167J-682	6.8K	1/6W CARBON
	R743	QRD167J-511	510	1/6W CARBON
	R744	QRD167J-511	510	1/6W CARBON
△	R745	QRD125J-182	1.8K	1/2W UNF. CARBON
	R747	QRD167J-511	510	1/6W CARBON
	R748	QRD167J-511	510	1/6W CARBON

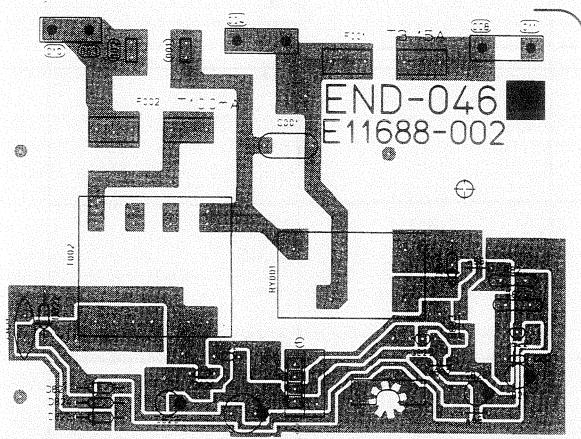
Others

△	ITEM	PART NUMBER	DESCRIPTION	AREA
		E11219-202(S)		L
		E11219-202(S)		T
		E11219-202(S)		U
	P313	EMV7112-003	CONNECTOR	
	P701	EMV5101-012B	PLUG ASSY	

△ : SAFETY PARTS

■ END-046 □ Primary PC Board Ass'y

Note: END-046 □ varies according to the areas employed. See note (1) when placing an order.



Note (1)

PC Board Ass'y	Designated Areas
END-046 [C] BS	the U.K.
END-046 [D]	Europe
END-046 [E]	West Germany
END-046 [F]	Australia

Transistors

△	ITEM	PART NUMBER	DESCRIPTION	AREA
			MAKER	
	Q822	2SC2235(O,Y)	SILICON	TOSHIBA
	Q823	DTC114YN	SILICON	ROHM

Diodes

△	ITEM	PART NUMBER	DESCRIPTION	AREA
			MAKER	
	D821	11E2	SILICON	NIHONINTER
	D822	11E2	SILICON	NIHONINTER
	D823	11E2	SILICON	NIHONINTER
	D824	11E2	SILICON	NIHONINTER
	D826	1SS133	SILICON	ROHM
	D827	MTZ6.2JC	ZENER	ROHM
	D828	1SS133	SILICON	ROHM

Capacitors

△	ITEM	PART NUMBER	DESCRIPTION	AREA
	C001	QCZ9019-472	4700PF	CERAMIC
	C001	QCZ9019-472	4700PF	CERAMIC
	C001	QCZ9019-472	4700PF	CERAMIC
	C001	QCZ9019-472BS	4700PF	CERAMIC
	C821	QCF21HP-473	0.047MF	50V CERAMIC
	C822	QETB1CM-477	470MF	16V ELECTRO
	C823	QETB1HM-105	1MF	50V ELECTRO
	C826	QETB1CM-476	47MF	16V ELECTRO
	C828	QETB1AM-107	100MF	10V ELECTRO

Resistors

△	ITEM	PART NUMBER	DESCRIPTION	AREA
△	R821	QRD14CJ-180S	18	1/4W UNF. CARBON
△	R821	QRD14CJ-180S	18	1/4W UNF. CARBON
△	R821	QRD14CJ-220S	22	1/4W UNF. CARBON
△	R821	QRD14CJ-220S	22	1/4W UNF. CARBON
△	R822	QRD167J-472	4.7K	1/6W CARBON
△	R823	QRD14CJ-821S	820	1/4W UNF. CARBON

△ : SAFETY PARTS

Others

△	ITEM	PART NUMBER	DESCRIPTION	AREA
		EMG7331-001 E11688-002(S) E11688-002BS(S)	FUSE CLIP Circuit Board Circuit Board	
		E65508-002 E67764-102	TAB WRAPPING TERMINAL	CBS
		E67764-202 E70859-001	WRAPPING TERMINAL EARTH PLATE	
△	P807	EMV7112-004	CONNECTOR	
△	T002	ETP1000-41EA	POWER TRANSFORMER	D
△	T002	ETP1000-41EA	POWER TRANSFORMER	E
△	T002	ETP1000-41EA	POWER TRANSFORMER	F
△	T002	ETP1000-41EABS	POWER TRANSFORMER	CBS
RY001		ESK1D12-113	RELAY	D
RY001		ESK1D12-113	RELAY	E
RY001		ESK1D12-113	RELAY	F
RY001		ESK1D12-113BS	RELAY	CBS

△ : SAFETY PARTS

Accessories List

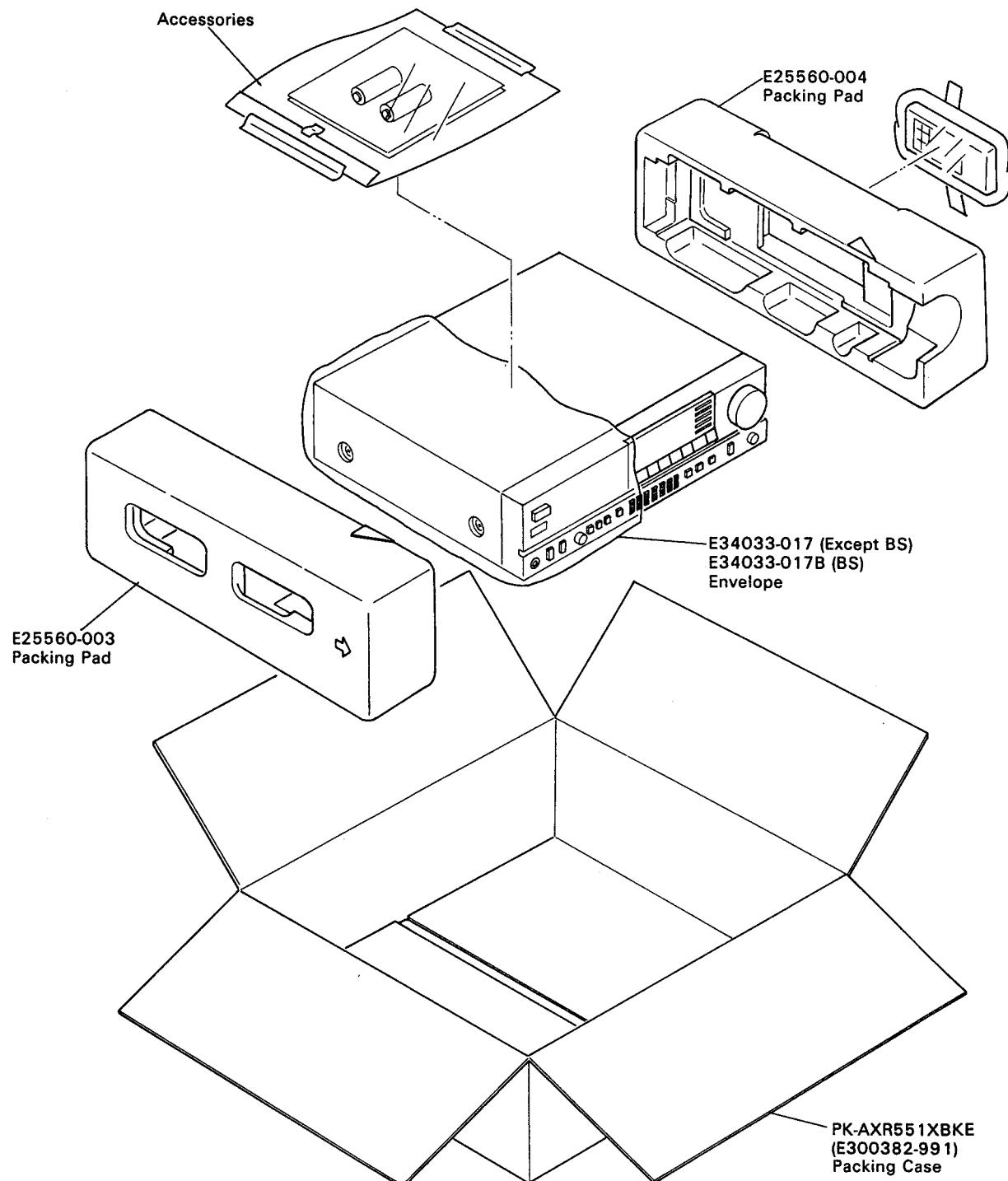
△	Part Number	Part Name	Q'ty	Description	Areas
	E30580-1464D E30580-1464DBS BT20029C BT-20117 BT20060	Instruction Book Instruction Book Warranty Card Warranty Card Warranty Card	1 1 1 1 1		Except BS BS A G BS
△	BT20066A BT20098 QMF51A2-6R3S QMF51A2-5R0S E67142-T6R3	ECC Agency Audio Warranty Fuse Fuse Fuse Label	1 1 1 1 1	for New Zealand	BS A U UE U
△	E67142-T5R0 E35497-015 EMC0201-001BS QZL1008-001 E04056	Fuse Label Caution Sheet AC Plug FTZ Imformation Sheet Siemens Plug	1 1 1 1 1	220V	UE U,UE BS G U,UE
	E43486-340A E43486-353B RM-SA551 UM-3(DJ)-2PSA E6581-4	Safety Sheet Instruction Sheet Remote Control Unit Battery Envelope	1 1 1 1 1		BS UE U,UE
	E41202-2 E41202-2B	Envelope Envelope	1 1	for Instruction Book for Instruction Book	Except BS BS

△ Safety Parts

The Marks for Designated Areas

A.....	Australia	UE.....	Saudi Arabia
E.....	Europe	U.....	Other Countries
G.....	West Germany	No mark indicates all areas.	
BS.....	the U.K.		

Packing Materials and Part Numbers



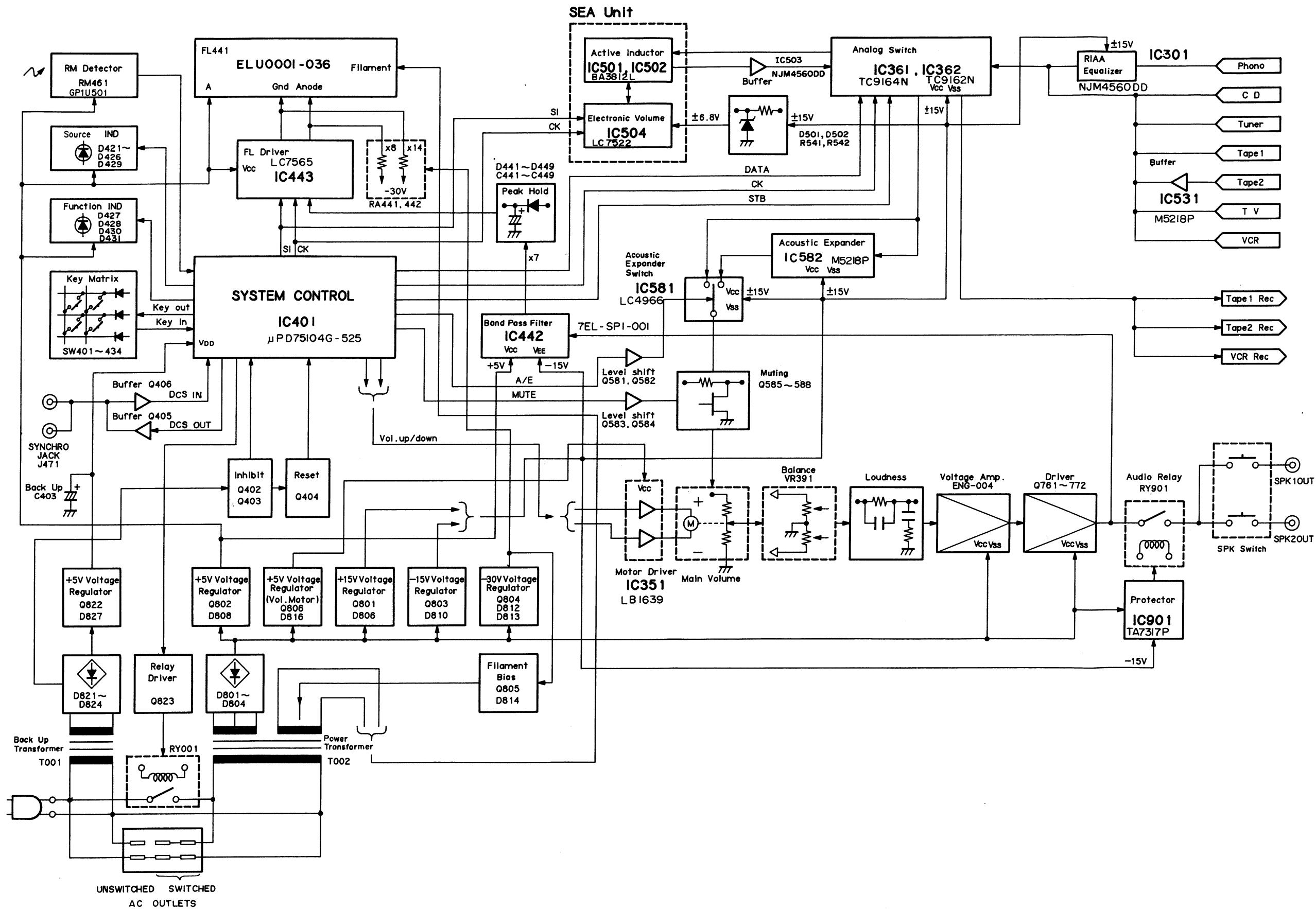
The Marks for Designated Areas

A.....	Australia	BS.....	the U.K.
E.....	Europe	U.....	Other Countries
G.....	West Germany	No mark indicates all areas.	
UE.....	Saudi Arabia		

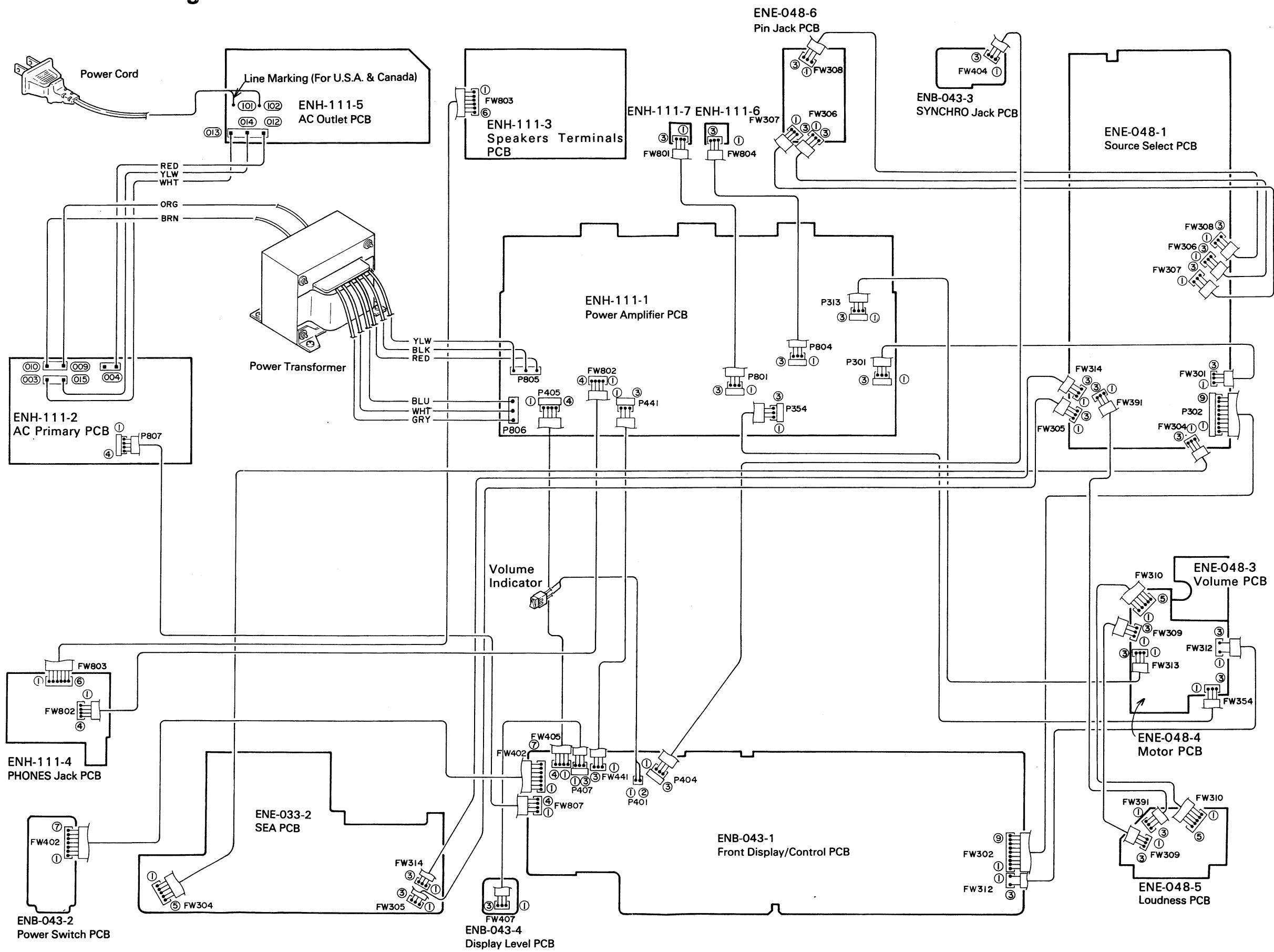
- MEMO -

- MEMO -

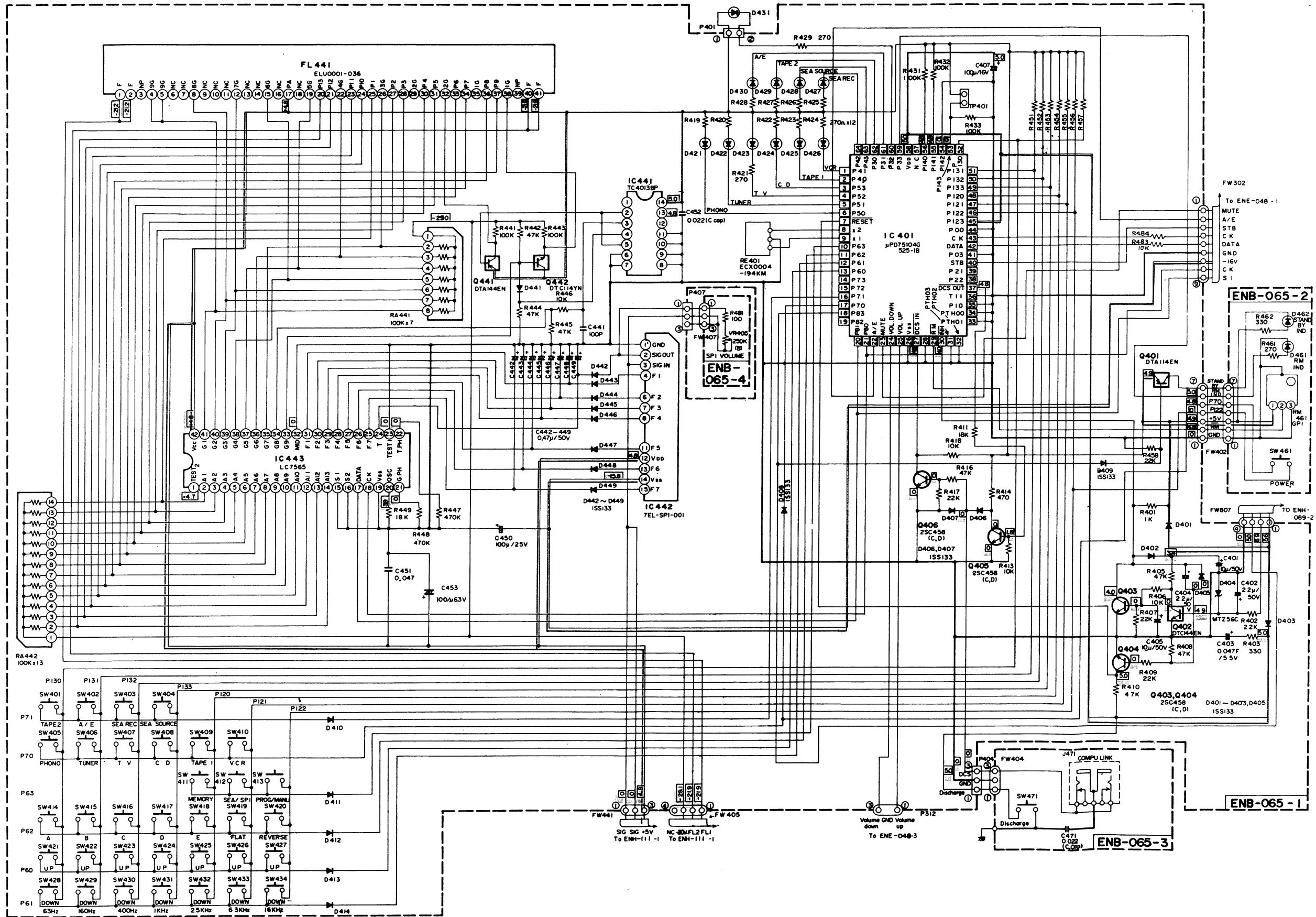
Block Diagram



Connection Diagram

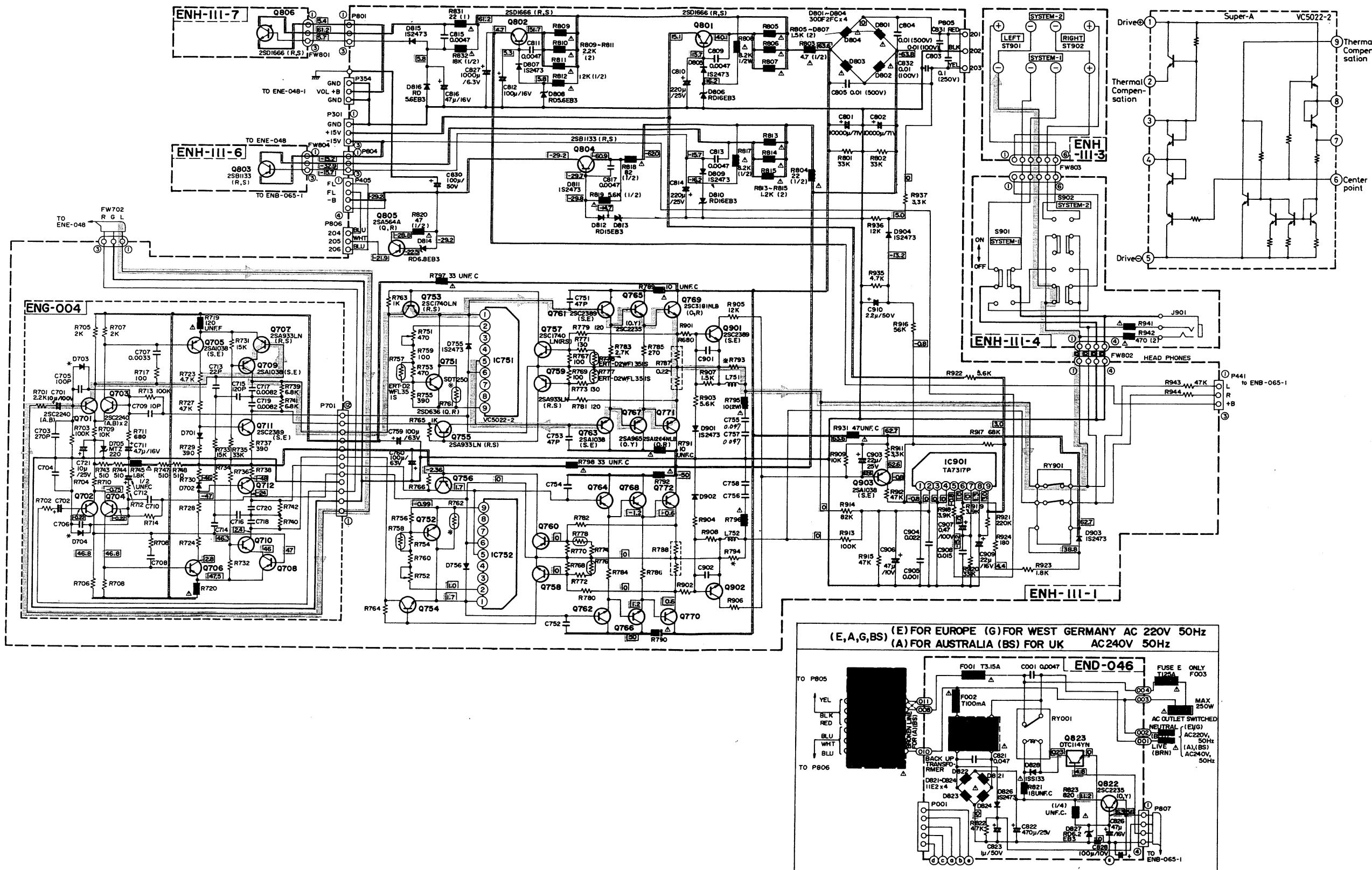


Front Control Section



■ Power Amplifier Section (for Saudi Arabia, Australia, the U.K. and Continental Europe)

■ VC5022-2 (IC751, IC752)

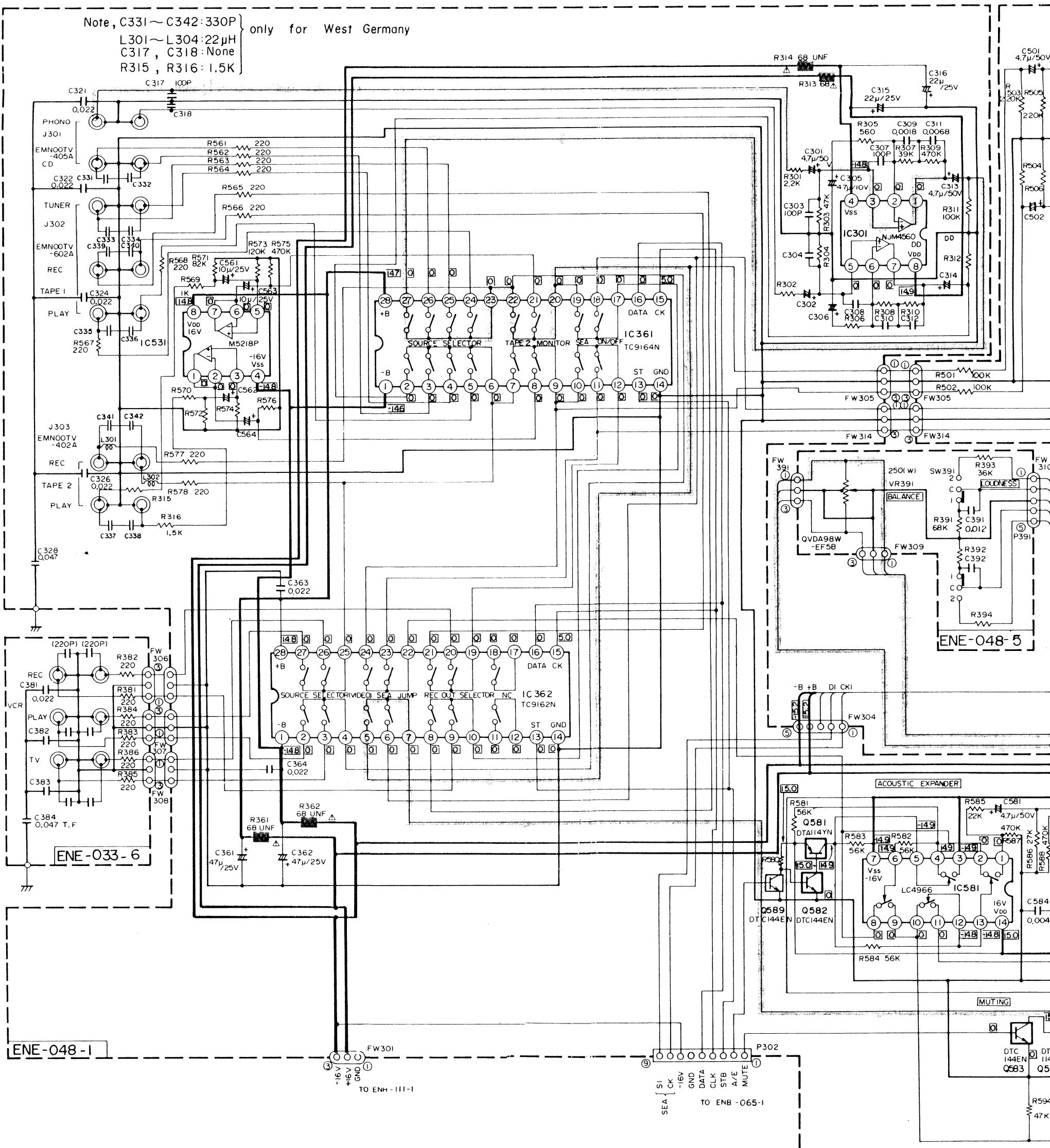


Schematic Diagrams

■ Source Control Section

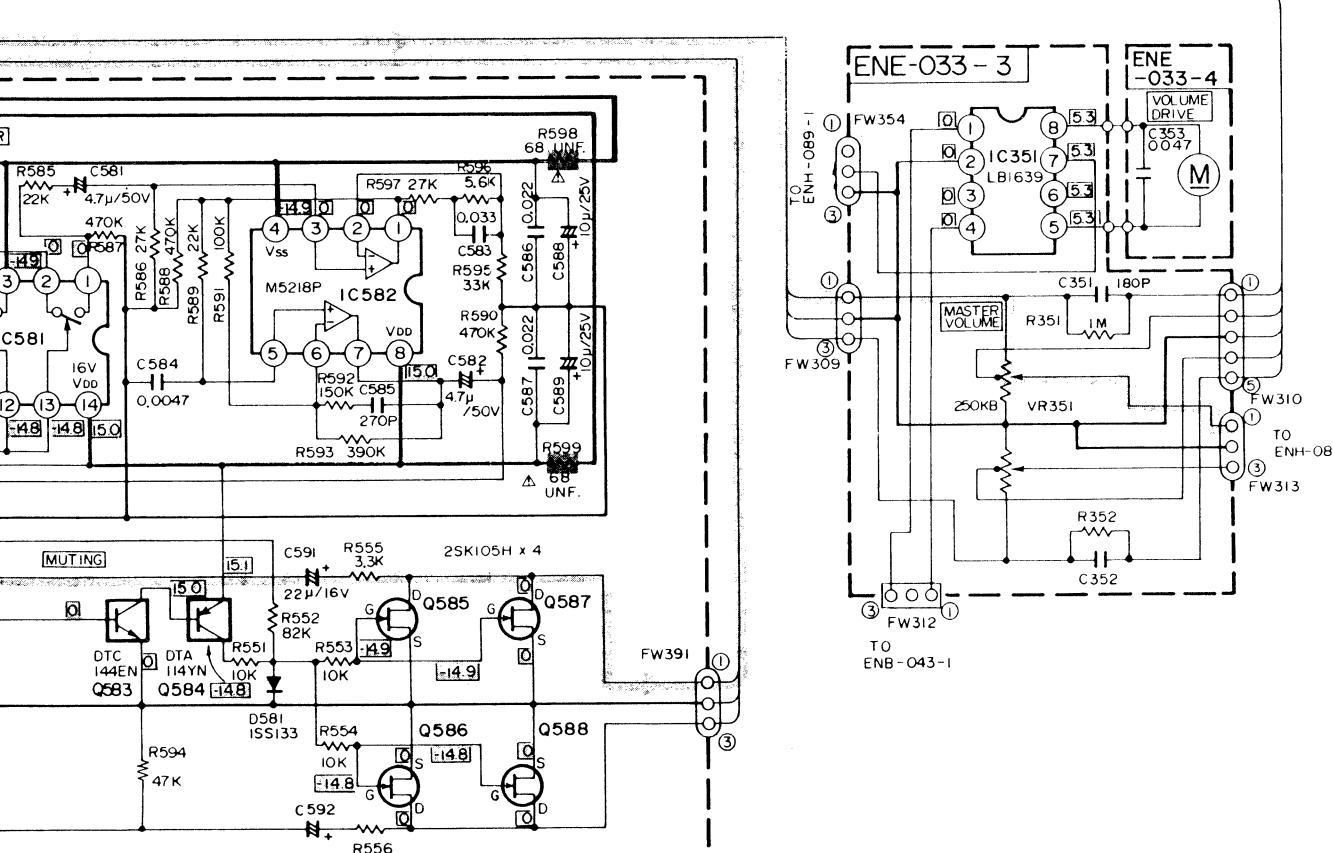
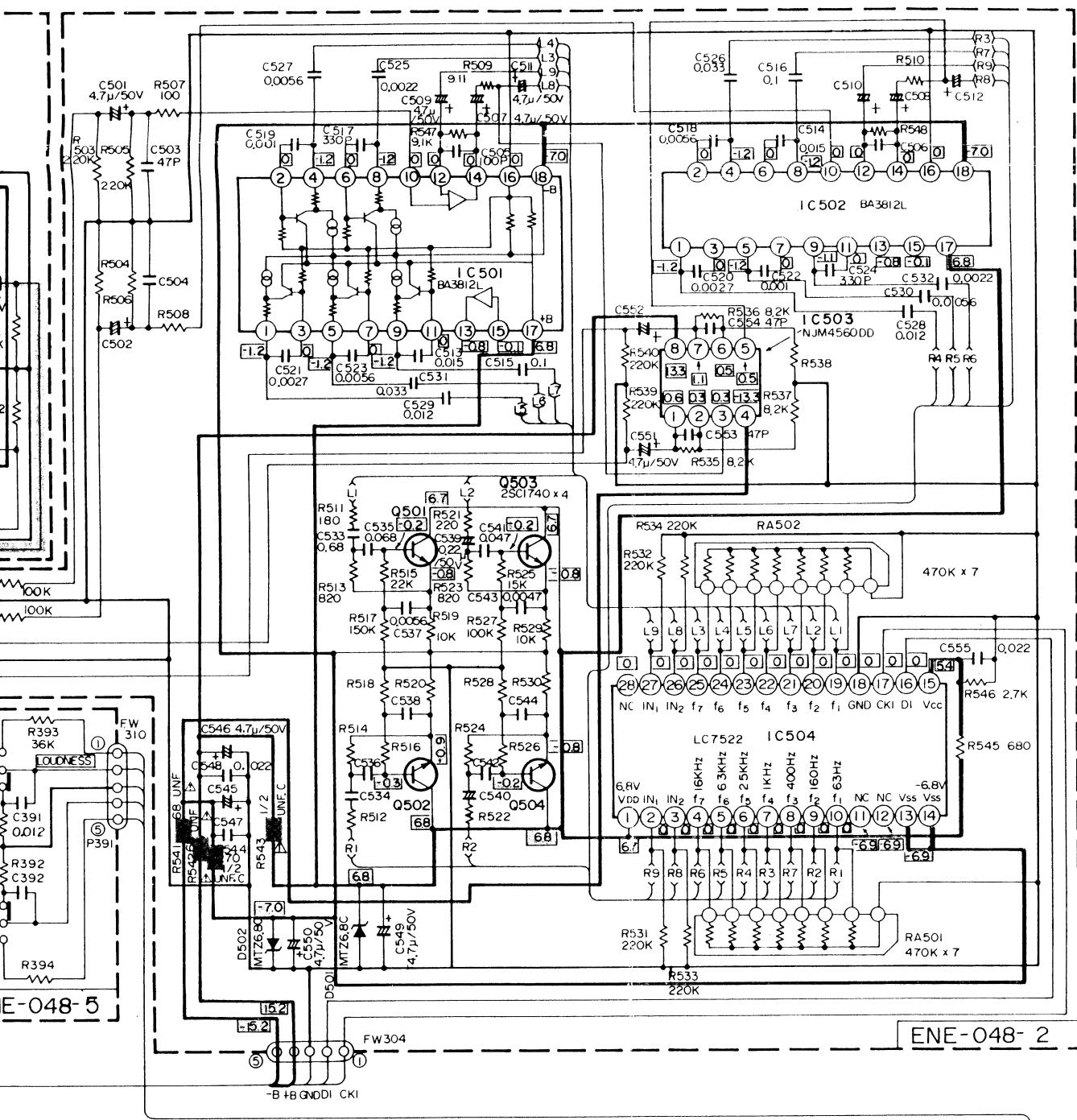
Notes:

1.  shows DC voltage to the chassis.
2.  indicates \pm B power supply.
3.  indicates signal path.



voltage to the chassis with no signal input.
power supply.
al path.

4. When replacing the parts in the darkened area (■) and those marked with △, be sure to use the designated parts to ensure safety.
5. This is the standard circuit diagram.
The design and contents are subject to change without notice.



■ Power Amplifier Section

